

ARISTOXENUS OF TARENTUM

DISCUSSION

RUTGERS UNIVERSITY STUDIES
IN CLASSICAL HUMANITIES

VOLUME XVII



EDITED BY
CARL A. HUFFMAN

ARISTOXENUS
OF
TARENTUM

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Preface

This is volume XVII in the RUSCH series. The first volumes in the series focused on Aristotle's successor Theophrastus. Starting with volume IX the focus switched to other members of what Fritz Wehrli called *The School of Aristotle*. Volumes IX–XVI dealt with Demetrius of Phalerum, Dicaearchus of Messana, Eudemus of Rhodes, Lyco of Troas, Hieronymus of Rhodes, Aristo of Ceos, Heraclides of Pontus and Strato of Lampsacus. The present volume XVII is devoted to essays discussing Aristoxenus of Tarentum, whom the *Suda* reports was bitterly disappointed to have been passed over as Aristotle's successor in favor of Theophrastus. Aristoxenus was most famous in antiquity as a music theorist, and the first six essays in the present volume focus on that aspect of his work. Aristoxenus, however, had a vast output, some 453 volumes according to the *Suda*, and he was also very famous in antiquity as a biographer. Chapters 7–10 are devoted to Aristoxenus' work as a biographer. Finally, chapter 11 deals with Aristoxenus' philosophy of music in the context of the early Academy. The volume makes no attempt to cover all aspects of Aristoxenus' work and instead addresses the two areas for which he was most famous,

music theory and biography. While there has been much good scholarship in the former area in recent years, to which the present essays contribute, the latter area has been relatively neglected and the present volume serves in part to remedy that neglect. Unlike some other volumes in the RUSCH series there is no new edition of the fragments of Aristoxenus with translations included here. I am in the process of carrying out such an edition, which will appear in due course.

All of the chapters in this volume, except chapter 1, were originally presented at a conference held at DePauw University in September 2009. I was responsible for the organization of the conference but benefitted considerably from the advice of Professors William Fortenbaugh and David Mirhady. My wife, Professor Martha Rainbolt, provided invaluable assistance both in making many of the practical arrangements for the conference in advance and in making sure that everything went smoothly during the conference itself. I want to thank DePauw University, and in particular the then Academic Vice President, Neal Abraham, for providing generous financial support for the conference. I would also like to thank Professor William Fortenbaugh and Project Theophrastus for a grant that covered additional expenses. I would like to thank all the participants in the conference for making it a success and, in particular, Professor Alexander P. D. Mourelatos, who read John Dillon's paper, when he was not able to attend. All of us were saddened at the passing of Professor Steve Strange, who was to have given a paper on Aristoxenus' psychology at the conference. He was a great scholar and a dear friend and will be sorely missed.

I have been responsible for editing all the papers in the volume but would again like to thank Professors William Fortenbaugh and David Mirhady for valuable advice. Finally, I would like to thank Professor Martha Rainbolt for reading every chapter and catching many errors that I had missed as well as for compiling the bibliography. Any mistakes that remain are, of course, my own responsibility.

Professor Robert Sharples, who was one of the founders of Project Theophrastus, the project to which these volumes owe their origin, was unable to attend the conference at DePauw and passed away not long afterwards. Professor William Fortenbaugh has provided a remembrance of Professor Sharples below.

CAH

Contributors

Andrew **BARKER**, Institute of Archaeology and Antiquity, University of Birmingham, Birmingham B15 2TT, UK. andrewqbarker@hotmail.com

David **CREESE**, School of Historical Studies – Classics, Newcastle University, Newcastle upon Tyne NE1 7RU, UK. davidcreese@newcastle.ac.uk

John **DILLON**, School of Classics, Arts Building, Trinity College, Dublin 2, IRELAND. dillonj@tcd.ie

William W. **FORTENBAUGH**, Department of Classics, Rutgers University, 131 George Street, New Brunswick NJ 08901, USA. fortенb@rci.rutgers.edu

Carl A. **HUFFMAN**, Department of Classics, DePauw University, 400 S. Locust St., Greencastle, IN 46135, USA. cahuff@depauw.edu

Timothy C. **POWER**, Department of Classics, Rutgers University, 131 George Street, New Brunswick, NJ 08901, USA. tcpower@rci.rutgers.edu

Antonietta **PROVENZA**, Dipartimento FIERI–AGLAIA (Filosofia, Filologia, Arti, Storia, Critica dei Saperi), Università degli Studi di Palermo, Viale delle Scienze, Ed. 12, 90128 Palermo, ITALY. antonelaprozenza@unipa.it

Eleonora **ROCCONI**, Faculty of Musicology, University of Pavia, Corso Garibaldi 178, 26100 Cremona, ITALY. eleonora.rocconi@unipv.it

Stefan **SCHORN**, Onderzoekseenheid Geschiedenis: Oudheid, Katholieke Universiteit Leuven, Blijde Inkomststraat 21 – postbus 3307, 3000 Leuven, BELGIUM. stefan.schorn@arts.kuleuven.be

Leonid **ZHMUD**, Institute for the History of Science and Technology, Russian Academy of the Sciences, University Embankment 5, 199034 St. Petersburg, RUSSIA. zhud@lz4246.spb.edu



Grace and Bob Sharples

Remembering Robert William Sharples

(1949–2010)

*William W. Fortenbaugh
December 1, 2010*

Robert William Sharples, known to his friends as Bob, was a world-class scholar with whom I collaborated for some thirty years. There is much that might be reported — all kinds of professional and personal experiences, some serious, some funny — but in this brief remembrance my focus, at least at the beginning, will be on Bob's involvement in three quite special projects. Each concerns Peripatetic philosophy at the close of the classical period and the beginning of the Hellenistic age — an exciting time in the history of ancient philosophy and one which Bob interpreted with extraordinary enthusiasm and insight.

The first project is often referred to as Project Theophrastus. Its goal has been to collect, edit, translate and comment on the fragments of Theophrastus of Eresus, Aristotle's pupil and second head of the Peripatetic School. Although several works of Theophrastus survive intact, the vast majority have been lost. We know of them only through quotations and reports found in secondary sources of a later period. The sources are numerous, and the material contained therein is invaluable for gaining a clear understanding of the early Peripatos. That is not a recent observation. Early in the nineteenth century, Johannes

Schneider (1818–21) published a collection of Theophrastean fragments, and in the middle of the century Friederick Wimmer produced a second (1854–62, republished with a Latin translation, 1866). Neither of the collections approaches completeness, so that their value as research tools is limited. Toward the end of the same century, Gustav Heylbut, made a first step toward completeness by collecting the ethical and political fragments, but his collection has not survived.

It was only in the twentieth century that a *Gesamtausgabe* would become a reality. I have used a German word, for interest in producing a complete collection was strongest in the German-speaking world. Three major scholars, Otto Regenbogen, Franz Dirlmeier and Olof Gigon, addressed the need, but all three failed to deliver. As Herwig Görgemanns explained to me, each was an Einzelkämpfer and a Gesamtausgabe called for a team. That was recognized by Fritz Wehrli who edited an impressive collection of fragments entitled *Die Schule des Aristoteles* or in English *The School of Aristotle*. When Wehrli was asked why he had not included Theophrastus in his collection, he is reported to have said, “I’m not crazy.” That may be an anecdote worthy of the Greek biographical tradition, but the reply is sensible. Wehrli too was an Einzelkämpfer. He was fully aware that doing justice to Theophrastus required more than a single gladiator, no matter how strong and daring he might be.

A team adequate to the task began to be formed in 1979. A distinguished Einzelkämpfer excused himself and three English-speaking scholars joined forces: Pamela Huby, John Keaney and myself. One of the three would drop out and there would be several additions, but none was more important than Bob Sharples. The team needed someone who could handle the fragmentary texts dealing with physics and biology. When asked who that might be, Richard Sorabji recommended Bob, who accepted early in 1980. Add to the mix an Arabic scholar, Dimitri Gutas, and the central team, FHS&G, was formed.

The time from Bob’s joining the team to the publication of our collection of fragments — two volumes, 1170 pages including translation and indices — was roughly twelve years. Throughout this period Bob was fully involved. Not only did he complete work on the physical and biological fragments in a timely fashion, but he also played a large role both in editing the so-called miscellaneous fragments and in assembling the concordances and indices that appear at the end of

the second volume. In addition, Bob responded promptly and patiently to requests for help or comment from other members of the team. He proved himself to be a welcome judge of philological issues, though we did occasionally disagree on how telegraphic the Latin apparatus to the source texts should be (some of us wanted to err on the side of readability). More than any other team member Bob looked for and found Greek and Latin fragments that had been previously overlooked. Some of these findings are of questionable worth. A clear example from the late Middle Ages is the *Lumen animi*, *Light of the Soul*, which Bob described as “notoriously unreliable.” Nevertheless, he opposed banishing such texts from our collection. He recognized that if our collection is to have value over many years it must present all named texts, in order that subsequent generations can decide for themselves what is genuine Theophrastus and what is the creation of a later age.

At the beginning of Project Theophrastus, a series of commentaries was planned for the different areas into which the source texts are divided. No one who knows Bob will be surprised that he was the first to finish his assignment. In 1995 his commentary on the biology texts was published, and in 1998 that on physics appeared. The rest of us were not asleep, but we were far behind. Pamela completed her assignments over the next eight years and I lagged even further behind. Bob’s promptness testifies to a brilliant, well-stocked mind, but it is also a mark of diligence and responsibility. In sum, it is not too much to say that without Bob, Project Theophrastus would not be where it is today. Our collection of texts might never have achieved the level of completeness that it did, and our work on the commentaries would not be as far advanced as it is today.

The second project to be mentioned is editing, translating and commenting on the so-called *opuscula* of Theophrastus. These are comparatively short treatises on natural science, sense-perception and metaphysics. Some of the treatises have received considerable attention but others have been largely overlooked. To the latter category belong *On Sweat*, *On Dizziness* and *On Fatigue*. As the titles indicate, their focus is physiological and therefore of interest to students of ancient medicine. Nevertheless the treatises have received little attention largely because the Greek texts have been badly transmitted and modern translations were lacking. To remedy the situation, Bob and I teamed up with Michael Sollenberger. Bob took *On Dizziness*, I took

On Sweat, and Michael took *On Fatigue*. Again Bob was first to finish and a willing resource when Michael or I stumbled. The modern medical doctor will undoubtedly find our work quaint; he might even suggest that the world would be no worse off, had the treatises been lost in the course of the Middle Ages. Fair enough from the standpoint of modern medicine, but for the historian of medicine and for the curious person who delights in learning, Bob's edition of *On Dizziness* (2003) has much to offer.

The third project is redoing Fritz Wehrli's *Die Schule des Aristoteles*. I do not want to suggest that Wehrli's edition of and comments on Aristotle's students and successors within the Peripatos are of little value. They contain much of value, but the editions of the ancient texts could be improved, the comments could be fuller and a modern translation is lacking. Accordingly, we decided to do our own edition of the school of Aristotle and to publish it in the series Rutgers University Studies in Classical Humanities. Each member of the school or at the most two members would be the subject of a single volume. And each volume would contain a text-translation as well as a commentary in the form of essays by individual scholars. To stimulate work on this project, conferences were organized, at which essays were read dealing with textual problems, difficulties in translation and substantive issues. Bob spoke at ten different conferences and contributed an equal number of essays to the published volumes. He has also done a new edition and translation of Strato of Lampsacus, who was one of Theophrastus' pupils and his successor as head of the Peripatetic School. That edition together with fourteen essays was delivered to the publisher in October and is scheduled for publication on December 31. It is sad that Bob did not live to see his work between hard covers, but I take consolation in the fact that I was able not only to tell him that his work was in the pipeline but also to send him an electronic copy of the final chapter. It concerns *Nachleben* and features a picture of Strato in his present reincarnation as a racing sloop on Barnegat Bay, New Jersey. I hope that Bob recognized the boat, for on one of his visits to New Jersey he was startled not by the boat but by the name on the transom.

Up to this point, I have spoken of our shared projects and presented Bob as a serious, gifted and tireless worker. That is entirely in

order, but I do not want to finish without making clear that Bob was more than a scholar. He had a soft side and was quite proud of his family. His lovely wife Grace I first met in London when Bob was not yet in the picture. And when his daughter Lizzie came along I was privileged to meet her as well. In fact, the Fortenbaughs and the Sharples hit it off so well, that Bob, Grace and Lizzie began visiting Connie and me during the summer in Bay Head. Bob proved to be not very agile on a sailboat: on one occasion he had a tumble and lost a watch that Grace had given him. I still do not know where that watch went, but in time Bob stayed in England, while Grace and Lizzie continued to visit. On more than one occasion, Lizzie brought a girl friend with an unusual name. I remember Sam, but my favorite was Nirvana. When Grace became sick the visits ceased. Her death was a blow to everyone who knew Grace. Bob was brave, but it was easy to tell how deeply he felt the loss.

Now Bob is no longer with us, but memories remain. Here are two or three. Over the years that I have known Bob, he has exhibited a capacity to transform himself. When I first met him at Rutgers University in March of 1981, I was introduced to a man of modest girth, who loved his beer. That is a love that I shared with Bob, and on occasion we overdid it. As time went on, beer and undoubtedly potatoes and all the good things that Grace served up had a noticeable effect. Bob became quite bulky and was ordered by his doctor to lose weight. He did just that and became even thinner than when we first met. Less beer and fewer potatoes will have played a role but almost certainly the most important factor was Bob's own determination. I remember well Grace telling me that Bob's transformation could not have occurred but for his disciplined character.

Being a human being, Bob could become angry and when he did there was most likely a good reason. I remember all too clearly the time that Brill refused to accept, on editorial grounds, a Greek text that Bob had laboriously typed himself. Apparently the font was not Brill's standard font, and the margins, although well prepared, were for some reason offensive to the editorial staff. Bob let his displeasure be known in the strongest terms, and I found myself talking long distance across the Atlantic in an effort to placate the folk at Brill. The details of the next days escape me, but Bob won and rightly so!

We should not forget Bob's capacity for fun. Not only did he enjoy a good laugh, but he also could be silly. That was made abundantly clear at Eresus on Lesbos, where Dimitri Gutas had organized a conference on Theophrastus. There in the town square, we discovered a herm-like bust of Theophrastus, which had been carved especially for the conference and with an eye to tourism in the future. Several of us wanted to have our photo taken with the bust in the background. But instead of lining up like uninspired tourists, we decided to make a human pyramid, and that we did. For doubters a photo still exists of the pyramid in progress. Bob is firmly situated in the bottom row.

It has been said more than once that Bob's death was untimely. It is not just that Bob was only 61 years of age (a youngster these days), but in addition he had much that he wanted to accomplish. He was especially keen that in 2011 or 2013 the subject of our biennial conference be Critolaus of Phaselis, head of the Peripatetic school in the middle of the second century BC. Here we disagreed. I wanted to complete our work on the Peripatetics of the fourth and third centuries, in order that we might bring together in two volumes the fragments of these earlier members of Aristotle's school. As it turned out, Bob would not have lived to participate in the conference had it been scheduled for either of the dates in question. More importantly, Bob's untimely death denied him the opportunity to compose an exhaustive treatment of Critolaus. That is true also of long term goals that Bob would have pursued and accomplished had he not been taken from us so soon.

Given Bob's active mind, I must believe that some time during his final months he reflected on Theophrastus' dying words. According to Cicero, Theophrastus reproached nature for granting stags and crows a long life, while human beings were given such a short life that they are denied the chance to perfect all learning. Surely Bob will have dismissed the report as stock material, which can be moved from one philosopher to another. Moreover, Bob will not have reproached nature. Rather he will have appreciated the years he shared with Grace and the support that Lizzie provided during his sickness. And finally he will have taken satisfaction in what he was able to accomplish in his allotted time. He will have realized and we all agree that his many writings are of such high quality that later generations will embrace them as important contributions to the field he loved so much.

1

Did Aristoxenus Write Musical History?

Andrew Barker

1. Introduction

The fragments and testimonia that preserve the remains of Aristoxenus' work give clear evidence of his lively interest in the music of the past, and show that he discussed at least some of the earlier composers and compositions in considerable detail. But it does not immediately follow that he addressed these topics in the manner or with the purposes of a historian. Such a person would presumably be concerned, among other things, to integrate his materials within a chronologically ordered narrative, perhaps by tracing lines of influence between one composer and another,¹ or by reconstructing the origins and development of significant musical genres.² We would also expect any responsible fourth-century historian to draw as far as possible on defensible

¹ As is done, for instance, by Glaucus of Rhegium, [Plut.] *De mus.* 1133f and 1134d-e.

² As for instance in Aristotle's sketches of the development of tragedy and comedy at *Po.* 1448a–1449b.

evidence, and at least sometimes to cite his sources explicitly.³ But comments on ancient artifacts of any sort (or artifacts that are thought to be ancient) may be motivated by concerns of other sorts, and the question of whether or not they accurately reflect historical facts may not be uppermost in their author's mind.

The question raised in the title of this essay is of some importance, since when scholars, both ancient and modern, write about music of the archaic and early classical periods, they are often relying on evidence that can be traced back to Aristoxenus' work. If he did indeed set himself the task of writing musical history, and if he tackled the project in an appropriate way, this treatment of his testimony will be tolerably justifiable. But if he did not, and if faithfulness to the realities of the past was not his principal objective — I don't mean that he deliberately falsified the record, only that historical accuracy may have been rather low on his list of priorities — we would be well advised to think twice before taking his statements at face value, in so far, that is, as we are trying to reconstruct the history of Greek music before his time.⁴ The question would still be worth asking even if we reckoned Aristoxenus' statements to be historically unimpeachable, since very few of the titles and topics of his copious works have been preserved. It would be useful to know whether they included a treatise designed to reconstruct Greek musical history for its own sake, as seems to have been done by Glaucus of Rhegium and Heraclides of Pontus.

In trying to answer the question, I shall examine the methods Aristoxenus uses in his studies of the music of the distant past, the tools that he brings to the task and the reasons why he engages in it. Ideally such a project would take into account all the fragments and testimonia in which material of this sort appears, but I shall not go down that road; they could only be treated superficially in a single paper. Instead I shall focus almost exclusively on evidence preserved in the pseudo-Plutarchan *De musica*,⁵ which not only contains the bulk of the surviving material but also offers the best available footholds for an enquiry

³ See for instance the citations of statements by poets and on two public inscriptions, in a passage derived from Heraclides Ponticus at [Plut.] *De mus.* 1134a-d.

⁴ On several of the fundamental issues raised in this paper see also Gibson (2005) 103–21; the conclusions she reaches differ substantially from mine.

⁵ Almost all modern scholars reject the traditional attribution of this work to Plutarch. It was probably written around the beginning of the third century CE.

of the kind I am proposing. Secondly, however, even this one text offers too much material and raises too many issues for them all to be examined thoroughly here. I shall therefore focus primarily on just three of the Aristoxenian passages in the *De musica* that are concerned with very ancient music. They are the most elaborate of his contributions to the subject, and all of them have a bearing on the compositions attributed, in the fifth and fourth centuries, to the semi-legendary Phrygian aulete Olympus. This limitation, however, is less restrictive than might at first appear, since the third excerpt is set in the context of a much longer passage whose derivation from Aristoxenus is clear; I shall argue that Aristoxenus is also responsible for the context of the second; and I shall draw some tentative inferences about the original setting of the first. The character of the frames within which the individual excerpts are placed gives valuable clues about the purposes they were designed to serve, and it turns out that the framing passages, especially the second, contain a substantial number of other statements about the music of the earlier periods. Our conclusions about Aristoxenus' comments on Olympus can thus be extended to embrace a fairly large and diverse sample of his statements about other composers and their music; and unless there are good countervailing reasons, there will be a *prima facie* case for applying them also to other remnants of his putatively historical writings.

Although the conclusions I shall draw may have a bearing, as I have said, on our estimate of the reliability of Aristoxenus' testimony, I shall say little about the question of whether or not his representations of earlier music are in fact historically accurate. This is partly because it is not relevant to my enquiry, whereas the question whether he was *aiming* at historical accuracy most certainly is. For other reasons, of course, we would dearly love to know whether his statements genuinely reflect the realities of archaic music-making, but even if I were trying to address that issue I would have no adequate way of pursuing it. In a good many cases, including those that will take center-stage in this paper, we have little or no evidence that is independent of Aristoxenus himself.

Not all the passages which I shall treat as derived from Aristoxenus have his name explicitly attached to them; but beyond the generalities that follow in this paragraph I shall make no attempt to justify my attribution to him of those that do not, except, as I have said, in

the case of the context in which our second excerpt is set.⁶ None of the other attributions is seriously controversial. It is agreed on all sides that the writer of the *De musica* contributes little (except a degree of confusion) to the material he found elsewhere, and that most of the work's content is derived from just two fourth-century authorities, Aristoxenus and Heraclides. He is also in the habit of using the same source over long stretches of his text, with only brief and occasional insertions from others; it may not always be easy to decide exactly where a passage drawn mainly from a single author begins and ends, but we can usually be confident about its main portions. In the case of Aristoxenus' most important contributions, furthermore, we can be guided by stronger evidence, since the passages that will mainly concern us have his fingerprints all over them, in their language, their preoccupations, their conceptual apparatus and both the degree of their technicality and the form it takes. If it were proved that their source was not Aristoxenus, we would have to assign them to some remarkably perceptive, methodologically alert and devoted Aristoxenian of a period between about 300 BCE and the date of the *De musica* (perhaps around 200 CE); but so far as we know no such person existed.

The *De musica* has the form of a sympotic dialogue, the bulk of which is occupied by two long speeches. The first is provided by Lysias, a performing musician (apparently an exponent of the art of singing to his own accompaniment on the kithara), and he disclaims any expertise or training in anything but the "manual" (χειρουργικόν) aspect of music (1135d). Most of his speech is quite appropriate to such a person; it is largely devoid of theoretical conceptions, recounting unadorned episodes in the early history of music without substantial comment, and relying principally on the naive but not wholly despicable work of Heraclides. It is only toward the end of his speech that he introduces Aristoxenus as a witness. The whole of chapter 11 (1134f–1135b) and probably chapter 12 (1135b–d) is derived from one of Aristoxenus' essays. These passages involve technicalities and theoretical arguments that seem thoroughly uncharacteristic of this speaker, and chapter 11 also gives us our first Aristoxenian testimony on the aulete Olympus. Chapter 13 is merely the brief epilogue with which Lysias

⁶ For a wider discussion of the extent of Aristoxenus' contributions to the *De musica* see Meriani (2004).

ends his speech. The second speaker, Soterichus of Alexandria, is not a musician, but he is a man of well-rounded culture and something of a scholar, someone who “has devoted himself not only to music but also to the rest of the *enkyklios paideia*,” as Lysias puts it (1135d). He is therefore well equipped to discuss theoretical issues and to deploy technicalities of which Lysias’ speech (apart from ch. 11) is innocent. A substantial amount of the material in his performance is taken from Aristoxenus — certainly parts of chapters 15–7, 19 (which is the second of our excerpts on music connected with Olympus), and with the possible exception of a sentence or two, the whole of chapters 31–6 (including our third excerpt, in ch. 33) and 38–9. It is arguable that a good deal of the remainder is also borrowed from the same source.

2. Aristoxenus on Olympus: (a) the *spondeion*

Olympus is one of the heroes of the *De musica*, a prime representative (despite his Phrygian origins) of the noble Greek tradition that modern composers,⁷ we are told, had so disastrously corrupted. Aspects of his music are described in nine passages, of which six are based on Aristoxenus’ work;⁸ it is clear that Aristoxenus, a resolute conservative in matters of musical style, was one of his most devoted admirers. Chapter 11 gives his account of Olympus’ *spondeion* (a melody or a type of melody for the *aulos*, used to accompany the pouring of libations to the gods), in which he locates the origins of the enharmonic genus.⁹

⁷ That is, composers of the later fifth century and the fourth, exponents of what is nowadays called the “New Music.”

⁸ All three of the others appear in the speech of Lysias. One of them (1132f) is a brief and vague remark derived from a relatively late source, Alexander Polyhistor. In the second (1133d-f) various authorities are mentioned anonymously, and one comment is attributed to the poet Pratinas, but the writer’s source for them all is probably Heraclides. The third (1133f) is continuous with the second and is probably also borrowed from Heraclides, but if so, Heraclides was reporting material he found in the work of Glaucus of Rhegium, whose approach to musical history is significantly different from his own. On the methods of these two writers see Barker (2009); on Glaucus see particularly pp. 279–85.

⁹ 1134f–1135b = fr. 83 Wehrli. The three genera of melody are enharmonic, chromatic and diatonic; they are distinguished by the structure of their tetrachords (sequences of three intervals spanning together a perfect fourth). In a regularly formed scale, the octave is made up of two such tetrachords, identical in structure, separated by the interval of a tone. When the enharmonic system had been fully developed

Modern scholars have regularly treated it as one of our most important pieces of evidence about music in the archaic period, and it has been much discussed.¹⁰ I shall not reexamine all the problems raised by its musicological details here, but some technicalities — which I shall try to explain for the benefit of non-specialists — will be unavoidable if we are to understand how Aristoxenus tackles the task of historical reconstruction.

The chapter sets out, as a report by Aristoxenus, the views of certain other people whom he calls the *mousikoi*: “Olympus, as Aristoxenus says, is thought by the *mousikoi* to have been the discoverer of the enharmonic genus; for everything before him was diatonic or chromatic. They suppose that the discovery was made in something like the following way” (1134f). The gist of their hypothesis is that while playing tunes on the *aulos* in the diatonic genus, Olympus sometimes made the experiment of playing falling phrases which started on the top note of the tetrachord (*mesē*) or on the note above it (*paramesē*), omitting the second-highest note of the tetrachord (diatonic *lichanos*, a tone below *mesē*) as the melody descended, and passing directly to diatonic *parhypatē* (a tone below diatonic *lichanos*). Thus instead of the sequence of two separate tones characteristic of the diatonic, these phrases incorporated the undivided ditone that stands at the top of an enharmonic tetrachord. The half-tone below it that completes the tetrachord in a diatonic system was left unaltered at this stage, so that only three notes (*mesē*, diatonic *parhypatē*¹¹ and *hypatē*) were left in the perfect fourth, forming a trichord instead of a tetrachord. Olympus, we are told, found the effect of this pattern of intervals admirable, and adopted it as a type of *systema* or scale, on the basis of which he composed pieces in the Dorian *tonos* (1134f–1135a).

(as it is not in the *spondeion*), its tetrachord consisted (in Aristoxenian terms) of a pair of quarter-tones at the bottom with an undivided interval of two tones above it. Chromatic and diatonic tetrachords can take various forms; the commonest kind of chromatic tetrachord has a pair of semitones below an undivided interval of a tone and a half, and the most familiar diatonic follows the sequence half-tone, tone, tone, from the bottom upwards.

¹⁰ The fundamental study is Winnington-Ingram (1928). See also e.g., Barker (1984) 215–8 and 255–7 and West (1992) 163–4 and 173–4.

¹¹ Since the system is now construed as enharmonic, this note becomes enharmonic *lichanos*, which has the same pitch as diatonic *parhypatē*.

To judge by the syntax of the passage,¹² Aristoxenus' report of what the *mousikoi* said extends a little further. They pointed out that the scale of Olympus' *spondeion* had none of the features specific to the diatonic or chromatic genera, and indeed that it had none specific to the enharmonic; the point is that it placed only one note between the boundaries of the interval of a fourth (a half-tone from the bottom), and that this note was common to all three genera. (It is *parhypate* in diatonic and chromatic, *lichanos* in enharmonic.) Hence the *spondeion* scale could not be directly identified as peculiar to any of them. We have to suppose, then, that the thesis that pieces which used it were Olympus' "first enharmonic compositions" (1135a) was based on an inferred connection between them and certain others, devised rather later, in which the half-tone at the bottom was divided into two quarter-tones, so completing an unambiguously enharmonic tetrachord (we shall return to this matter in due course). In another part of the chapter (1135b) we are told explicitly that the division of the half-tone "which people use nowadays" does not seem to figure in Olympus' oeuvre (οὐ δοκεῖ τοῦ ποιητοῦ εἶναι). Thus in treating Olympus' *spondeion* as enharmonic, the *mousikoi* were not guided by the structure of the scale alone, but also by their interpretation of a subsequent phase of musical history. They interpreted it in the light of a historical perspective that picked out the *spondeion* scale as the immediate ancestor of the enharmonic in its later archaic and classical form.¹³

Who, then, are the *mousikoi* whose views Aristoxenus is reporting? The word is commonly used of people who are not professional musicians, but are people of refined culture, well educated devotees of *mousikē* in its broadest sense. That is evidently the situation of Glaucon in Plato's *Republic*, for instance. Socrates, who claims to know nothing about the *harmoniai* (399a5), appeals to him for information about them, adding σὺ γὰρ μουσικός ("for you are a *mousikos*") by way of explanation (398e1). But Glaucon's knowledge turns out to be limited. He says nothing about the formal structures of the *harmoniai*, and when Socrates asks him parallel questions about rhythms he can only take refuge in generalities; he is completely at a loss

¹² The next two sentences in 1135a continue in indirect speech, and the first two clauses of the sentence that follows are introduced by the verb τιθέασιν, "they posit."

¹³ This interpretation may in fact be on the right lines, though it is unnecessarily restricted in scope. See West (1992) 163–4.

about the details (400a4–7). The technical knowledge displayed by the *mousikoi* in our passage of the *De musica* is of quite a different order. They understand the structures of the three melodic genera, they can identify features which they share, they are familiar with the names of the notes, and they are capable of forming a pair of theoretically viable hypotheses, one about the route by which the pattern of Olympus' *spondeion* was derived from the diatonic,¹⁴ and another which led them to connect the *spondeion* system with the later form of the enharmonic. It is worth noting that their first hypothesis presupposes that the diatonic system was older than the enharmonic; they are, in fact, explicitly credited with the view that chromatic as well as diatonic melodies existed before the enharmonic was devised. This is interesting not only because it suggests that they had a good deal more to say about musical history, but also because it is a position that Aristoxenus adopts as his own in the *Elementa harmonica*, without attributing it to anyone else (*El. harm.* 19.17–29). So too is the thesis that in a properly formed enharmonic tetrachord the highest interval is a complete ditone, and not the slightly smaller interval which “most people nowadays” substitute for it (23.12–6). In *De musica* 11, furthermore, it seems that Aristoxenus is perfectly content to accept what these *mousikoi* say.

According to the entry under his name in the *Suda* (= fr. 1 Wehrli), Aristoxenus had been trained as a musician, and he writes as a fully fledged expert in musical matters. It appears from the evidence I have outlined that the *mousikoi* whom he cites are people whose opinions he respects, unlike the *harmonikoi* whom he repeatedly and contemptuously criticizes in the *Elementa harmonica*. We should note also that they are designated in the plural, and that he refers to them in the present tense. Both of these features make it less likely (though not impossible) that he was referring to a written source, and there is nothing in the passage to suggest that he was. While we cannot be sure, I am inclined to think that they are not people whose books Aristoxenus had consulted, and further that they are *mousikoi* in a different sense from the one we found in the *Republic*. This second usage also appears in Plato, at *Phaedrus* 268d6–e6, where Socrates' argument (268a8–269c5) treats the case of a *mousikos* as parallel to that

¹⁴ If West's diagnosis (n. 10 above) is right, however, this part of the story cannot be historically correct.

of a doctor such as Eryximachus or Akoumenos, a tragedian such as Euripides or Sophocles, and an orator such as Pericles or the “honey-tongued Adrastus.” That is, he is an expert practitioner of the art, not merely a cultivated enthusiast. I suspect, then, that Aristoxenus’ *mousikoi* were practicing professional musicians whom he knew personally and with whom he had talked; these are just the sort of people whose opinions he would have been most likely to trust, and it is very significant that some of their views — perhaps many more than we can identify — have been incorporated into the *Elementa harmonica*.

The remainder of the chapter (1135a-b) shifts into direct speech, and it seems clear for this and other reasons that the account of the views of the *mousikoi* is now over, and that what follows is a paraphrase of Aristoxenus’ independent reflections on the matter. So far, we have been told or can easily infer that the *spondeion* included the notes spaced as follows, reading from the bottom upwards: half-tone, ditone, tone. The first two intervals span a perfect fourth from *hypatē mesōn* to *mesē*, and the tone separates *mesē* from *paramesē*. But it now appears that there was an additional note at the top, and Aristoxenus first considers a question about the size of the interval separating it from *paramesē*. Picking up the thesis of the *mousikoi* that the *spondeion* scale showed the special characteristics of none of the genera, he comments that this is true, so long as one does not construe this last interval (which he calls ὁ συντονώτερος σπονδειασμός, “the tenser [sharper or higher] *spondeiasmos*”) as a complete tone. If it is so construed, he says, we may be tempted to suppose that the system is diatonic. It is not entirely clear why he thinks this suggestion tempting, since in a regularly formed diatonic scale no note would occur in this position; but in any case he dismisses the assumption on which it is based. He does so, initially, on purely theoretical grounds. A scale so constructed would be in breach of one of the rules he enunciates in the *Elementa harmonica*, according to which there cannot be a sequence of two consecutive ditones in any properly formed scale; and such a sequence would indeed occur in the scale that the assumption postulates, since it follows an undivided (“incomposite”) ditone with another which is divided into two separate tones.¹⁵

¹⁵ *El. harm.* 63.35–64.10. In fact the rule, as stated there, applies only to a sequence of two incomposite ditones, but the principles on which Aristoxenus relies in demonstrating his rules would also forbid the sequence that he criticizes in the *De musica*.

He follows this criticism with another: the identification of this interval as a tone is simply false, since, in fact, it is a quarter-tone smaller. This comment must be based on his own observation, if it is based on anything at all; the coupling of a theoretically based criticism with one grounded in the evidence of the well-trained ear (that is, his own) is thoroughly characteristic of him, and appears several times in the *Elementa harmonica* (e.g., 32.17–31). At this point in the *De musica* he goes on to appeal directly to the testimony of the listener's ear in support of another point, already mentioned above, that in Olympus' compositions the half-tone at the bottom of the scale is not divided into two quarter-tones. "This is easy to grasp if one listens to someone playing the *aulos* in the ancient manner (*archaikōs*)" (1135b). At the end of the chapter we find the additional, almost parenthetical comment that the half-tone was so divided, at a later date, "in both the Lydian and the Phrygian compositions," and finally a compendious peroration: "It is clear that Olympus supplemented music by introducing something that had not been done before and was unknown to his predecessors, and that he was the founder of the music that is Greek and noble (*kalos*)" (1135b).

There are several conclusions to be drawn from this passage. In the first place, Aristoxenus treats the opinions of the people he calls *mousikoi* with a respect that he does not extend to the *harmonikoi* mentioned in the *Elementa harmonica*. They seem to speak the same musical language as he does, to hold the same views about the structures of the diatonic and enharmonic genera, and to be conversant with at least some aspects of the kind of harmonic theory that he champions. More importantly, perhaps, regardless of the historical improbability of their hypothesis about the "invention" of the *spondeion* scale, their account of its structure cannot have been based on written sources. It must have been derived from their experience in listening to the melodies, and we have seen that the same is true of Aristoxenus' own statements.¹⁶ He also tells us in the *Elementa harmonica*, repeatedly and with emphasis, that one cannot successfully

One can indeed derive from them the consequence that no sequence of two ditones can be acceptable in a non-modulating scale if either one of them is incomposite.

¹⁶ We know from other sources that pieces attributed to Olympus were known and admired in the fifth and fourth centuries: see particularly Aristophanes *Eq.* 8–10; Plat. *Smp.* 215b-c and *Min.* 318b-c and Aris. *Pol.* 1340a.

undertake harmonic analysis without first having “trained one’s sense-perception to accuracy.” The only way in which one can establish the sizes and sequences of intervals used in the various forms and styles of melody is by listening to the melodies with a thoroughly expert ear (e.g., *El. harm.* 33.1–26), an activity which does not merely demand well-focused attention to a small selection of compositions but sustained experience of melodic composition in all its forms and styles (*El. harm.* 35.1–20). We may infer that the *mousikoi* whose views he reports were, in his opinion, genuine experts in this respect. The *Elementa harmonica*, however, mentions no individual melodies, and hence does not show us how Aristoxenus or others would have applied this strongly empiricist principle to the analysis of any actual composition. *De musica* 11 provides us with an example of just such an analysis, and we shall shortly meet several others.¹⁷

We have seen that he is also ready to assess the credentials of a hypothesis about an ancient composition’s structure by reference to a principle established theoretically, through argumentation rather than simple observation (that is, the principle that a sequence of two ditones is “unmelodic”). But this does not mean that he is claiming for “theory” an autonomous authority over the judgment of the ear. He holds, on the contrary, that it is only on the basis of the wide-ranging experience of a well trained ear that it is possible to proceed, inductively, to a reliable formulation of the rules that govern their combinations. His intention in the *Elementa harmonica* is to show how the nature (*physis*) of melodic movement in general determines the ways in which intervals can be placed in melodies of every sort, through “demonstrations that agree with the perceptual phenomena” (*El. harm.* 32.10–9), and “to adopt principles which agree with the perceptions of those who are experienced in music, and to demonstrate what follows from them” (32.31–33.1). The principles to which he appeals cannot then be at variance with the evidence of an expert listener’s ear. They are, in fact, abstractions from a large pool of such evidence, and can

¹⁷ We may note that this approach contrasts sharply with one that seems to have been adopted by Heraclides, who appears to have based his historical account primarily on written records (the words of ancient poetry and certain public inscriptions), and to have been disinclined to trust the assertions of musical analysts (*harmonikoi*, 1134d), unless they were supported by the words of the “ancient writers.” Cf. Barker (2009) 284–5.

legitimately be used to question the expertise of a listener with whose contentions they conflict.

There seems, then, to be nothing characteristically “historical” about the angle from which Aristoxenus approached his discussion of the *spondeion*. If it depended wholly on the observation of features which he and contemporary musical experts detected in performances which they themselves heard, coupled with an appeal to a principle abstracted from their experience of melodies of every sort, what he was studying and analyzing must have been something that existed in the present, some time in the late fourth century. We may well have doubts as to whether his account has any credentials as *history*, that is, whether he had any solid grounds for projecting his conclusions back into the distant past. Nothing in the passage gives us any assurance on this point. But we must postpone judgment for the present, since we have no direct information about the original context of the passage, which might have offered more satisfactory historically oriented evidence, and could have given some indication of the purpose for which Aristoxenus presented his analysis. *De musica* 11 tells us nothing about that; for all we can tell, it might have formed part of a straightforward, chronologically organized history of music — or then again it might not. But passages later in the dialogue may give us some help with these issues, and I shall return to them at the end of the next section.

3. Aristoxenus on Olympus: (b) the *Spondeiazōn Tropos*

Chapter 19 (1137b-e) discusses something called the *spondeiazōn* (or *spondeiakos*) *tropos*. No one is named as the source for the information it gives. But it is clearly related very closely to the account of the *spondeion* in chapter 11 in both its subject matter (as the title of the *tropos* suggests) and its method; and its technicalities, its terminology and its conceptual environment are unmistakably those of Aristoxenus. It must certainly be based on his work. It is initially tempting to guess that it paraphrases a passage that followed the discussion of the *spondeion* more or less immediately in the original text, but I think that would be a mistake, and I shall explain my reasons at the end of this section.

By designating his subject as a *tropos* (rather than e.g., a *melos*) Aristoxenus makes it clear that he is not describing an individual piece

of music but a style of composition (the word *tropos* appears in this sense several times in the *Elementa harmonica* and repeatedly in Aristoxenian sections of the *De musica*). The *spondeion* itself, however, is apparently not a composition in this style, since the scale of pieces in the *spondeiazōn tropos* is more extensive and complex.¹⁸ Further, if chapter 19 is to be consistent with chapter 11, Aristoxenus cannot have attributed the *spondeiazōn tropos* to Olympus, since here the half-tone is divided into two quarter-tones, whereas in the earlier passage he asserted that this division of the half-tone was not the work of that composer. But Olympus is nevertheless mentioned in chapter 19, along with certain unnamed “followers.” We are told that although the note *nētē synēmmenōn* was not used in the melody of this *tropos*, this was not because the note was missing from these composers’ repertoire, since they made use of it elsewhere, in their Phrygian compositions (1137d). This guarantees that Aristoxenus thought of the *spondeiazōn tropos* as characteristic of composers in what we may call the “Olympus tradition,” but without the inconsistency of expressly attributing it to Olympus himself. He seems to have treated it as a direct descendant of Olympus’ *spondeion*, perhaps devised in the next generation after him. But he need not have done so on the basis of historical evidence; the structural connection between the two is not hard to detect, and may have been sufficient to convince him that the more complex of them was a later development of the simpler.¹⁹

The passage is important to students of Greek music, above all for what it tells us about the use of a melody with a heterophonic accompaniment, that is, the practice of accompanying some of the notes of the melody with notes that differed from them. It identifies several pairings of melodic and accompanying notes, specifying which of them were used to produce concords and which to produce discords.

¹⁸ For various reasons, which I shall not pursue here, it also seems likely that pieces in the *spondeiazōn tropos* were designed for a singer accompanied by the *aulos*, whereas the *spondeion* itself was for a solo aulete without the voice.

¹⁹ See e.g., Barker (1984) 255–7. Perhaps it is the *spondeion* and the *spondeiazōn tropos* that Aristoxenus has in mind when he mentions the “first and second of the ancient styles” as exemplifying the correct way of treating the highest interval of an enharmonic tetrachord, *El. harm.* 23.3–12. I have thought so in the past, but Stefan Hagel has recently argued (at considerable length) that the suggestion must be mistaken; see Hagel (2010) 414–29, explicitly rejecting this thesis on p. 424. I leave others to judge whether his complex arguments are conclusive.

Since heterophony is only occasionally exemplified in the surviving scores and is rarely discussed in written texts — even more rarely in any detail — the information preserved here is very precious, whether it is information about archaic practices themselves or only about performances in the fourth century. It is interesting to learn that when compositions in a given style were passed down in the performing tradition, musical experts like Aristoxenus apparently believed, rightly or wrongly, that the tradition preserved the manner of accompaniment peculiar to them as well as their melodies; this is something that cannot be confidently inferred from any other source. But the details of our evidence about Greek methods of accompaniment are not relevant to our present concerns, and I shall not explore them.²⁰

As to the methods by which Aristoxenus approached this repertoire, they are clearly much the same as those used in the analysis of the *spondeion*, though without the latter's explicit appeal to principles of a theoretical sort. His account can only be the product of close attention to contemporary performances of music in the relevant style, coupled with skill in applying harmonic analysis to patterns of sound presented to the ear. Aristoxenus has listened to the music and fixed it in his memory; he has abstracted from it a list of notes used in its melodies and a separate list of the different notes used in the accompaniment; he has identified the ways in which the accompanying notes are paired with notes of the melodies, and he has classified these combinations of notes as discords or concords.²¹ We need not assume that he was trying to catalogue every note and every combination of notes that occurred in performances of these pieces;²² we shall see in a moment

²⁰ For examinations of the evidence, including the present passage, see West (1992) 205–7 and Barker (1995).

²¹ The study therefore depends on the exercise of all three faculties which Aristoxenus identifies as essentially involved in harmonic analysis, hearing (*akoē*), thought (*dianoia*) and memory (*mnēmē*), the last being required because a melody is a process of “becoming” (*genesis*). “One must perceive what is happening now, and remember what has happened.” See *El. harm.* 38.27–39.3.

²² It is overwhelmingly probable, for instance, that melodies which included enharmonic *lichanos* and *parhypatē* (both of which are mentioned in the passage) also included *hypatē* (which is not). *Hypatē* lies a quarter-tone below *parhypatē* and completes the tetrachord; a sequence running down to *parhypatē* demands resolution onto *hypatē*. It is also relevant that in an enharmonic environment the notes *lichanos*, *parhypatē* and *hypatē* are separated by quarter-tones, and jointly form the little structure called the *pyknon*. Aristoxenus regularly treats the *pyknon* as a unit whose

that he had other purposes in view, which did not demand such completeness. In order to understand the purposes for which he presented this account we need to consider its context. It forms part of a long passage (chs. 17–21) that is unified by a single continuous theme. The historical content of all these chapters is designed to demonstrate that although the composers of earlier periods used only rather simple musical resources, they were nevertheless also well aware of all the other musical possibilities that were exploited by their successors in the later fifth century and the fourth (particularly by exponents of the “New Music” such as Timotheus and Philoxenus). The restricted scope of the compositional techniques they employed was not due to ignorance but to deliberate choice. This “not from ignorance” theme is constantly reiterated in the course of the passage.²³

The historical information presented in these chapters is extremely diverse. It is not organized chronologically, or on any other detectable principle independent of the theme I have outlined. The only apparent reason why the writer chooses to discuss these particular bundles of data (on Plato’s views about the *harmoniai*, on Olympus and Terpander, on the *spondeiazōn tropos* and other works by composers in the Olympus tradition, on fifth-century tragedy, and so on) is that each provides grounds for the “not from ignorance” thesis. It is inextricably embedded in the presentation of the data, and their selection makes no sense without it. I find it impossible to believe that the compiler himself chose the theme, and had the enterprise and resourcefulness to trawl through a mass of information dispersed among earlier sources, picking out material that suited his purposes and eliminating the remainder, and arranging his account in an appropriate way. This is not how he goes to work elsewhere, and it would almost certainly have been beyond his ability.

The theme must then have been a governing thread in the original source; and the crucial question is whether the source was Aristoxenus. The thesis that he was indeed responsible faces an immediate difficulty. Chapter 17 begins by commenting on Plato’s rejection of the “mournful” Lydian and Mixolydian *harmoniai* and the privileged

individual intervals always go together as a pair; a scale containing one of them and not the other makes no musical sense.

²³ It reappears explicitly at least ten times between 1136e and 1138c.

position he assigned to the Dorian.²⁴ He adopted this stance, we are told, “most certainly not, as Aristoxenus says in the second book of his *Mousika*, because he was ignorant of the fact that those others too [i.e., those in the Lydian and Mixolydian *harmoniai*] have some usefulness in a polity ruled by guardians;²⁵ for Plato had studied musical science very thoroughly ...” (1136e-f). On the face of it, the allusion to Aristoxenus means that he did indeed accuse Plato of ignorance in this respect and that the accusation is false; in that case it becomes less likely that he was also the source of the “not from ignorance” theme, in which the discussion of Plato plays a significant part. One might suggest, perhaps, that Aristoxenus cited Plato as a notable example of the ignorance of which he will say that the early composers were innocent, and that the writer of the *De musica* rebutted the accusation, but I think there is a simpler explanation. The rather clumsy formulation in the text (οὐ μὰ Δία ἀγνοήσας, ὡς Ἀριστοξενός φησιν ἐν τῷ δευτέρῳ τῶν Μουσικῶν, ὅτι ...) might equally well be intended to mean that Aristoxenus said that Plato was not ignorant of the relevant facts. I suspect that it is; the phrase “as Aristoxenus says ...” may indeed indicate that the writer is quoting from his source directly: “It was ‘most certainly not,’ as Aristoxenus says in the second book of his *Mousika*, ‘because he was ignorant ...’.” If this were not the intended sense, this passage would be unique in the *De musica*; nowhere else does the writer utter a breath of criticism of Aristoxenus or any of his other sources, or say anything to register disagreement with them. Furthermore, as the chapter proceeds, it lays emphasis on the fact that Plato favored the Dorian *harmonia* even though he knew that it had been used in the composition of many kinds of piece other than the militaristic songs he explicitly associates with it, including *partheneia* by Alcman, Pindar, Simonides and Bacchylides, processional, paeans and even lamentations and *erōtika*. The list probably comes from Aristoxenus, and he is unlikely to have contended that Plato was unaware of such compositions, since they were entrenched in the cultural consciousness of every educated Greek.

²⁴ 1136e–1137a = fr. 82 Wehrli. See Plat. *Rep.* 398d–399c.

²⁵ The phrase is πρὸς πολιτείαν φυλακικήν, possibly “a polity that guards itself,” or the like, referring to the military and security-oriented preoccupations of this part of the *Republic*.

This reading of chapter 17 may not convince everyone.²⁶ But the case for attributing the “not from ignorance” theme to Aristoxenus remains very strong, regardless of how we handle that particular difficulty. This theme, to begin with, is the organizing matrix for the whole passage on the *spondeiazōn tropos*, whose Aristoxenian origin can hardly be doubted. The notes used in the accompaniments and not in the melodies are cited explicitly as evidence that the composers knew about these notes, and chose not to use them in the melodies because they found them unsuitable for that purpose (οὐκ ἐφαίνετο αὐτοῖς οἰκεία εἶναι, 1137c), or in one case because anyone who did include the note in question in his melodies “would actually have been ashamed of the *ethos* it produced” (κὰν αἰσχυνθῆναι τὸν χρησάμενον ἐπὶ τῷ γιγνομένῳ δι’ αὐτὴν ἥθει, 1137d). In the remainder of chapter 19 the allusions to the use of this note in the melodies of compositions in the Phrygian *harmonia* by “Olympus and his followers,” and to these composers’ omission of the tetrachord *hypatōn* in Dorian pieces but not elsewhere, are motivated solely by the governing “not from ignorance” thesis; the choice of these features of the compositions and no others would make no sense in a purely historical survey, or in one designed for any other intelligible purpose. The compiler of the *De musica*, as I have said, is most unlikely to have devised the theme, to have carefully sifted Aristoxenus’ writings for data that would support it and to have assembled an appropriate set of items for himself; much more probably he has taken it ready-made from the original source.

The same is conspicuously true of chapter 20, another passage whose Aristoxenian lineage is unmistakable.²⁷ It focuses on the fact

²⁶ I return to this passage in my other essay in this volume.

²⁷ It uses Aristoxenus’ terminology, but that by itself may not guarantee his authorship. More conclusively, it asserts that the chromatic genus is older than the enharmonic, and goes on to explain that “older” here means “discovered and used at an earlier date by human nature (*physis*)” (1137e). This fits perfectly with the statements about the relative ages of the genera at *El. harm.* 19.20–9, but it is not simply a paraphrase of that passage. The *Elementa harmonica* refers to all three of the genera, not just the chromatic and enharmonic; the sense in which it uses the expression “older” is conveyed in its remarks about the genera themselves, not separated off into an explanatory parenthesis; and the *De musica* includes an addendum which the *Elementa harmonica* lacks, explaining that so far as the nature (*physis*) of the genera themselves is concerned, none of them is older than another. It must be based on a passage in a different work, where Aristoxenus addressed the matter again from a slightly different perspective.

(as it alleges) that the chromatic genus was never used by the tragedians, even though it had already been part of the compositional repertoire in other musical genres for a long time, and such composers as Phrynichus and Aeschylus were certainly not unaware of it. Here again the facts recorded are neither chosen nor expressed as elements in a chronological history of music; they fall into place only in their role as contributions to the on-going argument. This chapter, furthermore, is continuous with the next (it begins ὁ αὐτὸς δὲ λόγος καὶ περὶ ..., “the same point holds of ...,” 1137f), which starts by setting out — again in Aristoxenian language — a catalogue of musical forms and techniques which were not used by certain named but otherwise unknown composers of the past. It goes on to note that composers of music for the *aulos* in two styles that are current “nowadays” reject one another’s usages (though, of course, they know all about them), and that singers to the kithara no longer adopt the style of Timotheus (though it was still very well known and continued to be so for several centuries). The names of the composers who originated the two “contemporary” styles (Dorion and Antigeneidas) place the writer firmly in the later fourth century, that is, in the time of Aristoxenus; and only a writer who was as closely involved as Aristoxenus with the music and musicians of his time could have presented all the details the passage contains. Nor, once again, could this particular assortment of materials have served any historical or argumentative purpose except the one assigned to it in our text.

I conclude, then, that Aristoxenus was responsible not only for recording the facts preserved in these chapters but also for the thesis for which they provide the supporting evidence, and that it was he who pressed them into its service. There can be little doubt about the motivation behind the thesis itself, that it was “not from ignorance” but by deliberate choice that the various composers mentioned avoided certain notes, scale-systems, styles and techniques in their work. It is part of Aristoxenus’ stubborn defense of the simpler “ancient” styles of composition against the meretricious charms of the “New Music,” with its despicable populism and theatricality, its unashamed appeal to the emotions and its abandonment of traditional structural restraints. His over-riding theme is summed up at the end of chapter 18; compositions in the ancient style, simple though they are, are greatly superior to those that are complex and “use many notes,” and all those whose

music involves many notes and many styles in combination are inferior to the great Olympus (1137b).²⁸

To end this section I want to return briefly to the case of the *spondeion*. Given its close connection with the *spondeiazōn tropos*, it would be natural to suppose that the account of it in chapter 11 came from the same part of Aristoxenus' work, and that it too was recruited to the support of the "not from ignorance" thesis. But, in fact, this is unlikely. No doubt its treatment of Olympus' system as arising by way of the deliberate omission of a note in the diatonic scale could have been used for that purpose, but the passage gives no hint that it was; and its rhetoric, culminating in the assertion that by devising this system Olympus had introduced something entirely novel (1135b), points in a very different direction. I noted earlier that the passage is unlike anything else in the speech of Lysias, and there is no clear connection between it and the preceding chapters. There is no indication of the nature of the Aristoxenian work from which it came, and we are left in the dark about its original context.

But it is not hard to make a plausible guess. The writer of the *De musica* seems to have drawn on a very limited number of sources, and the passage on the *spondeion* would have fitted very well into the context of another bundle of (almost certainly) Aristoxenian material, in chapters 28–9 (1140f–1141b). Chapter 27 has returned to the theme of the noble simplicity of ancient music and the irresponsible theatricality of the new, and chapter 28 begins with a question that a puzzled reader might then ask: "Do you really mean that the ancient composers made no new discoveries and introduced no innovations?" The writer answers that they certainly did add novelties to the repertoire, but kept them within the bounds of dignity and decorum (ἀλλὰ μετὰ τοῦ σεμνοῦ καὶ πρέποντος, 1140f). He goes on to provide a long list of their innovations, which we need not pursue in detail; but it may be worth noticing that just as the passage on the *spondeion* begins with Aristoxenus' report of what certain other people (the *mousikoi*) say, so

²⁸ The same theme is pervasive throughout chapter 19; it reappears often elsewhere, notably in the story of Telesias of Thebes recounted in chapter 31 (1142b–c = fr. 76 Wehrli), where Aristoxenus is explicitly named as the source; I shall say a little more about this story below. For a very thorough study of another fragment that graphically expresses Aristoxenus' views about the contrast between ancient and modern music see Meriani (2000).

this one is introduced by statements made on the authority of “those who have given an account of such matters” (οἱ γὰρ ἱστορήσαντες τὰ τοιαῦτα). Each item in the catalogue is specified only very briefly, without any of the elaborations found in chapter 11; perhaps the writer has condensed Aristoxenus’ exposition fairly drastically, or perhaps Aristoxenus presented it in roughly this form, discussing the *spondeion* at greater length because it was his prime example. The case cannot be proved, of course, but this would certainly be a suitable niche for it. However that may be, the picture painted here of talented composers who introduced new elements of musical construction, but who nevertheless consistently upheld proper standards of musical decorum, works very well alongside the “not from ignorance” theme, as a contribution to Aristoxenus’ championship of the ancient styles.

4. Aristoxenus on Olympus: (c) the *Nomos* of Athena

The context of the third substantial passage on Olympus’ music is quite different. It appears in chapter 33, at 1143b-c, in the course of an extensive section (chs. 31–6 1142b–1144e) the whole of which (with the possible exception of a few lines at 1142d) is undoubtedly based on Aristoxenus, beginning with the story of Telesias (n. 28 above). The tale is designed to show the decisive influence that a composer’s early musical training and experience exerts on the character of his work. Telesias, we are told, had been brought up on the “finest” kind of music — that is, the music of Pindar and others who worked in the ancient style — and his own compositions in this manner were a success. Later in life, however, he became besotted with the complex, “theatrical” music of Timotheus, Philoxenus and the like, and studied their works very thoroughly; and yet he was quite unable to produce successful compositions of a similar sort. “The reason,” Aristoxenus smugly concludes, “was his excellent training from childhood onwards; and so if someone wants to make music with fine discrimination, let him model it on the ancient style” (τὸν ἀρχαῖον ἀπομμεῖσθω τρόπον, 1142c-d).

The moral of the story turns the spotlight on Aristoxenus’ championship of the older style, but there is no trace of this theme in the subsequent chapters; and it is a different aspect of the tale that makes it a suitable introduction for them. When Telesias failed in his attempts at composition in the modern manner, it was not because his

early training had so molded and restricted his musical taste that he was immune to the New Music's charms; he was, in fact, so enraptured by them (Aristoxenus says "completely deceived," ἐξαπατηθῆναι) that he came to "despise" the excellent compositions on which he had been brought up. Nor was his failure due to his ignorance of the ingredients from which the "theatrical" music was constructed or the compositional strategies used by its exponents; on the contrary, he had examined them with great care. We are led to believe that he did indeed produce compositions in the modern manner, presumably quite tolerable pieces of Philoxenian pastiche — as no doubt any competent fourth-century composer could. What Aristoxenus means by saying that these pieces were unsuccessful,²⁹ I think, is that he was unable to harness the relevant resources with sufficient discrimination and flair to create the aesthetic and emotional effects at which he was aiming. Despite his technical mastery of the kinds and combinations of modulation, melodic embellishment, rhythmic irregularity and so on which were characteristic of the New Music, he lacked the special kind of musical intuition or judgment that enabled a Timotheus or a Philoxenus to deploy them effectively, identifying the particular devices which would best serve their musical purposes at specific moments in their compositions, and would be likely to elicit their audiences' enthusiasm.

The next five chapters are tangled and disordered, but a clear line of argument runs through them in support of a heavily emphasized and contentious conclusion. According to the two leading authorities on the subject, Plato and Aristotle, the *ethos* of a piece of music, its aesthetic character, its moral status and its influence on the psychological dispositions of its hearers, depends directly on the nature of the harmonic and rhythmic structures on which it is built. The Dorian *harmonia* imposes one kind of *ethos* on a melody, the Lydian another, and different varieties of rhythm create their own specific *ethē* in a similar way.³⁰ Aristoxenus denies this, with particular emphasis in chapter 33, where our discussion of Olympus appears.³¹

²⁹ The verb Aristoxenus uses to convey the notion of "succeeding" is κατορθοῦν. For the sense apparently intended here see LSJ s.v. κατορθόω, 2b.

³⁰ Plat. *Rep.* 398d–400c and Aris. *Pol.* 1340a–b.

³¹ Cf. also especially ch. 36 1144c–e. That this was Aristoxenus' view might already be inferred from the list at 1136f–1137a, mentioned above, of the very various types

He insists that the technical musical disciplines that analyze such structures — harmonics, rhythmic and the rest — cannot provide any understanding of musical *ēthos*. Harmonics, for instance, studies the melodic genera, intervals, concatenations of tetrachords, notes, keys and modulations, “but it can go no further than this.” It can tell us nothing about whether the composer has chosen the structures he uses “appropriately” (*oikeiōs*); “for the enterprise of harmonics does not extend to such matters ... since it is ignorant of the attribute (*dynamis*) of appropriateness. For neither the chromatic nor the enharmonic genus ever comes already equipped with the attribute of appropriateness, in correspondence with which the *ēthos* of the melody that has been composed presents itself; but this is the work of the *technitēs*” (1142f–1143a).

The *technitēs* of the last sentence is sometimes the performer, whose interpretation of a piece will be judged for the “appropriateness” of the *ēthos* it creates to the composition that has been entrusted to him (1144e). Elsewhere in these chapters the *technitēs* is usually the composer, as he is in the passage that directly concerns us. It is important to notice that although Aristoxenus’ focus is consistently on the capacities we need in order to make reliable judgments about the merits of a composition, the sentence about the *technitēs* need not and probably does not mean that such a person is always reliable in his judgments about musical *ēthos*. What it says is that the production of *ēthos* is his work (*ergon*). That is, the *ēthos* does not depend directly on the identity of the structures he employs but on the ways in which he has put them to use in the act of composition itself. He may or may not understand why his strategies have been appropriate, if they were, to the creation of the *ēthos* in question; but whether he does or not, the *ēthos* that actually emerges is the result of what he has done with his resources.

This is the context in which the passage on Olympus’ *Nomos of Athena* appears, prefaced by the comment that *ēthos* is generated by “some way of combining <musical ingredients> or mixing them or

of pieces that had successfully been composed in the Dorian *harmonia*. The existence of Dorian love-songs, laments and so on, as well as martial music, guarantees that the Dorian structure cannot be associated with just one kind of *ēthos* to the exclusion of others. For a fuller discussion of Aristoxenus’ views on the basis of musical *ēthos* and the criteria of musical judgment, see Barker (2007) 233–59.

both.”³² What we are told about the *nomos* is designed as an illustration of this point, as well as of the broader thesis about the composer’s responsibility for the *ethos* of his compositions. Thus Aristoxenus says that the *ethos* of its opening section is created by the way in which the enharmonic genus is mixed with the Phrygian *tonos* and a slow paeonic rhythm (the *paiōn epibatos*), together with the actual formation of the melody and the rhythm (*melopoia* and *rhythmopoia*) and a subtle modulation of rhythm from paeonic to trochaic. He adds that even without any further changes to the underlying structures, the *ethos* of the piece is transformed when it passes into a later section (analogous, perhaps, to what we would call another movement), the one known as the *harmonia* (1143b-c). He does not labor the point that this can only be due to a change in the way Olympus was deploying his melodic and rhythmic resources, since they themselves are the same as before; but that is clearly the inference to be drawn.

As in the other two passages we have examined, Aristoxenus’ remarks about the harmonic and rhythmic structures he mentions must be based on an analysis of what he heard when he listened to performances of the *nomos*. There is, in fact, little difference between the methods he uses here and those by which he dissected those other antique survivals, except that this time his listening has another dimension too; it has enabled him to distinguish not only the musical components of the piece but also the different *ethe* associated with its various parts, to which, he has told us, his technical expertise by itself would have provided no access. What is more significant from the present perspective is that here again his analysis of Olympus’ composition is embedded in a discussion of a wholly non-historical sort, whose outlines I have tried to sketch, and does not form part of an essay in musical history as such.

As I said at the beginning of this section, the argument to which the remarks about the *nomos* contributes is not the same as in the other passages. There is no trace of the “not from ignorance” theme; and after the comments at the end of the story of Telesias there is no sign of Aristoxenus’ deeply rooted preference for the ancient styles. In

³² 1143b. “Combination” (*synthesis*) probably refers to the linking of various elements in sequence, as it does in *Elementa harmonica*, and “mixture” (*mixis*) to their simultaneous activation, as when a particular melodic pattern is played in a particular rhythm.

this context he seems, in fact, to be remarkably even-handed in his references to ancients and moderns; the chapter which contains the example of Olympus' *nomos* also offers — for much the same purpose and without any critical comment — an analysis of the pattern of modulations in a dithyramb of Philoxenus (1142f), who had served in the Telesias story as an example of a composer in the most extreme of modern styles. Perhaps we may detect a hint of Aristoxenus' regular attitude in the fact that while Philoxenus produced his effects by means of a flurry of modulations, Olympus achieved his variations of *ēthos* more discretely and subtly, without needing to resort to such departures; the inferiority of modern composers is demonstrated by the fact that they cannot manage without these outlandish tricks. But while that message may possibly be implicit in the passage, it is certainly given no prominence.

Only one work by Aristoxenus, the *Peri mousikēs* ("On Music"), is mentioned by name in the *De musica*, and it seems likely, though it cannot be proved, that all the Aristoxenian material in the dialogue is derived from it.³³ Almost everything in the *De musica* that is explicitly attributed to Aristoxenus or can confidently be identified as dependent on his work falls within one or other of the contexts we have been discussing, and cannot be interpreted as a contribution to a straightforward musical history. Two passages, more or less continuous with one another in our text, fall outside these contexts. The first is a brief remark at 1136c = fr. 80 Wehrli: "In the first book of the *Peri mousikēs* Aristoxenus says that Olympus was the first to have played a lament for the Python in the Lydian *harmonia*." The second (1136c-d = fr. 81 Wehrli) tells us that, according to Aristoxenus, the person who devised the Mixolydian *harmonia* was Sappho, that the tragedians learned it from her, and that when they combined it with the Dorian the resulting mixture of solemnity and emotionality was particularly well suited to the genre. Evidently there were controversies about the chronology implicit in these statements, since the passages go on to record other views about the origins of the *harmoniai* to which they refer.

³³ It was an extensive work in at least four books. Book 1 is cited at 1136c = fr. 80 Wehrli and book 2 at 1136e = fr. 82 Wehrli (it is described there as Aristoxenus' *Mousika*, but this may mean simply "his work on music" and need not be intended as a title. I take it to refer to the same treatise). Athenaeus (619d) mentions book 4.

We cannot be sure whether Aristoxenus entered the chronological fray himself, or whether statements he made in another context have merely been recruited to this purpose by another writer (in view of the obscurities and confusions in the passage, it might even have been the compiler himself). In either case his remarks could indeed have appeared in the course of a historical survey, but clearly they need not be understood in that light. They might have appeared, for example, in the passage we have glanced at on the innovations of the ancient composers (1140f–1141b), or in a discussion of the emotional effects attributed to the *harmoniai*, which receive as much attention in these chapters as the circumstances of their origins. On the basis of the contents of their statements, one might make a case for the view that the sequence followed by the text of the *De musica* actually reflects that of the original, and that the paragraphs in which these statements appear (chs. 15–6) paraphrase material with which Aristoxenus introduced the “not from ignorance” passage reflected in chapters 17–21. This would be encouraged by the reference in chapter 15 to Plato’s rejection of the Lydian *harmonia*, on the grounds that it is suited to lamentation (thus anticipating the discussion of Plato and the Dorian in chapter 17); and though Plato is not explicitly mentioned in connection with the Mixolydian in chapter 16, his attitude toward it might well have been noted in the Aristoxenian text. The allusion to his views about “these *harmoniai*” (apparently referring to the Lydian and Mixolydian) at the beginning of chapter 17 might be taken as a confirmation of this hypothesis. But this cannot be correct; even if the treatise cited as Aristoxenus’ *Peri mousikēs* in chapter 15 (1136c) is the same as the *Mousika* of chapter 17 (1136f), the material taken from the former is assigned to book 1 and that of the latter to book 2. Unless the writer’s references are inaccurate, the statements made in these two chapters must, therefore, have been extracted from different parts of Aristoxenus’ work. Chapter 16 seems more likely to have belonged with the preceding chapter rather than the one that follows.

5. Conclusions

The upshot of this discussion is that the *De musica* gives us no solid grounds for thinking that Aristoxenus wrote a history of music, or that the statements about the music that he associates with early composers

were based on evidence that a historian would think cogent. So far as his purposes are concerned, he had important non-historical fish to fry, and so far as we can tell he conducted his research almost exclusively by listening attentively to music performed in his own time, and analyzing it in the light of his own doctrines about harmonics and rhythms. It is of course possible that the pieces he heard had indeed been handed down more or less unchanged in the performing tradition,³⁴ and that their attribution to composers of the distant past, transmitted orally from teacher to pupil down the generations, was an accurate record of their origins. Perhaps the music that Aristoxenus heard really did retain the central features of an early archaic *spondeion*, and perhaps the melodies transmitted with Aeschylus' lyrics had really undergone no significant modifications in the century or so that had passed since they were composed. There may be independent grounds for believing that the performance tradition in which these pieces were handed down had preserved them unaltered, or there may be other evidence on which we can draw that would confirm what Aristoxenus says about them. But he makes no attempt to establish their historical credentials himself, and musical history is not the enterprise in which he is engaged. He is fundamentally concerned with issues about the present, specifically, in the cases we have considered, with the ways in which a piece of music acquires its aesthetic character, with the grounds of musical judgment, and with the characteristics and merits of the music which he regards as truly admirable. He thinks of this, perhaps correctly, as music of the sort that was typical of the ancient composers and is now on the verge of being lost; but he makes it clear that there are some contemporary composers, if only a few, who also subscribe to its principles, and whose music (Telesias' earlier compositions, for instance) he would have described in similar terms. What matters to him is its stylistic restraint and its noble simplicity, not its location in time.

None of my remarks should be taken to imply that his representations of archaic music are necessarily misleading, and certainly not

³⁴ Certainly not in written scores, which were unknown in the archaic and early classical periods, and were very rare before Hellenistic times; the first mention of them in our sources comes from the late fourth century, in some contemptuous comments by Aristoxenus himself (*El. harm.* 39.4–41.24), and the earliest surviving specimens date from the third.

that they are bound to be less accurate than those of a writer like Heraclides, whose methods, however ineptly they may be applied, are recognizably those of a historian. Far from it. But perhaps what I have said can serve as a salutary reminder that despite Aristoxenus' profound knowledge of music and the technical expertise he brings to his analyses, we should be a little cautious in our attitude to his evidence in so far as it relates to the music of a distant past.

2

Instruments and Empiricism in Aristoxenus’ *Elementa Harmonica*

David Creese

1. Introduction

Aristoxenus defined harmonics as the science concerned with all melody,¹ and it is the subject of the collection of writings that we have received from the manuscript tradition as the *Elementa harmonica*. Its three books were not originally parts of the same treatise: the second contains a fresh introduction, which duplicates many aspects of the introduction of book 1, but also differs in its articulation of both the scope and the conception of the science. The third book consists exclusively of theorems on topics mainly to do with the succession of intervals in melody (e.g., “two ditones will not be placed one after

¹ καθόλου μὲν οὖν νοητέον οὖσαν [sc. τὴν ἀρμονικὴν] ἡμῖν τὴν θεωρίαν περὶ μέλους παντός, *Harm.* 32.10–1 (from the introduction to bk 2); compare the opening sentence of book 1, where harmonics is the primary part, among several, of the science (here ἐπιστήμη, not θεωρία) of melody. Page and line references to the *Elementa harmonica* follow the pagination of Meibom’s 1652 edition (bk 2 begins at 30.9, bk 3 at 58.14); all quotations are from Da Rios’ edition (1954). Translations are my own.

another,” 64.1). At least one promise made in book 1 is apparently fulfilled in book 2;² others are left unfulfilled.³ Thus the prevailing view is that the *Elementa harmonica* is not a unified treatise but an incomplete assembly of Aristoxenus’ attempts, in at least two phases of his career, at a systematic exposition of the science of harmonics.⁴

The argument I shall propose in this paper concerns the methodological implications of a passage in book 2, in which Aristoxenus sets out a procedure designed to settle a controversy over the measurement of an important musical interval by others smaller than it. The procedure cannot be done without an instrument, but Aristoxenus does not mention this; and yet since the participation of the reader’s perception is both an explicit and essential component of the method, the omission carries serious consequences: an instrument is needed to provide evidence for perception to judge. The purpose of this paper is to address the problems caused by this omission, to suggest some possible reasons for it, and in the process to define more clearly the role of instruments as tools of persuasion in Aristoxenus’ harmonics.

2. The Nature of Attunement

Near the beginning of book 2 Aristoxenus describes harmonics, the science concerned with all melody, as one that investigates “how as it is tightened and slackened the voice (*phōnē*) places intervals by nature.” He goes on: “For we assert that the voice moves with a movement that is caused by nature and that it does not place an interval at random” (32.12–8). After citing (and summarily dismissing) certain

² Book 1 contains a reference (24.4–10) to a discussion somewhere else of a way to construct discords by means of concords and the use of this method in determining the magnitude of the fourth relative to intervals smaller than it. The passage at the end of book 2 with which this paper is primarily concerned (55.3–58.5) answers this description, but it is possible that Aristoxenus was referring to a similar passage now lost from book 1. It has been suggested (Barker [2007] 121) that 55.3–58.5 is a later revision of material that originally appeared in the treatise from which our book 1 survives.

³ The last component subjects of harmonics introduced at 5.32–8.3 are not given the promised detailed treatment in what survives of books 1–2; book 3 (what remains of it) treats some of the subjects introduced in book 2, but not all of them (e.g., 36.2–14).

⁴ For detailed treatments see Mathiesen (1999) 294–334, Gibson (2005) 39–75, Barker (2007) ch. 5. The unitarian position is argued by Bélis (1986) ch. 1.

of his predecessors whose inept approaches to the science varied from the pursuit of things outside the proper scope of harmonics to bald pronouncements devoid of causes (*aitiai*) or proofs (*apodeixeis*), he announces his own method: "We, on the other hand, attempt to assume first principles (*archai*) which are all plain to those skilled in music and to demonstrate (*apodeiknunai*) the things that follow from them" (32.32–33.1). His intention, then, is to present harmonics as a body of knowledge that can be learned and understood within an axiomatized deductive framework, in which self-evident, unprovable *archai* form the logical basis for a series of demonstrations (*apodeixeis*) of dependent theorems. Aristoxenus also intends to treat harmonics as a kind of natural science, since it is clear that he regards melody as something which can be said to have a nature (*physis*),⁵ and that the goal of harmonics is in his view to reveal the underlying natural order according to which the voice locates and sings melodically appropriate intervals.

As a natural science whose object, melody, is something that exists exclusively in the realm of only one of the senses, Aristoxenus' harmonics must be based on principles accessible to the musical ear. This places perception in a prominent role: one cannot be a student of harmonics without relying on one's sense of hearing. But the unreasoned use of the ear does not lead to harmonic understanding. Aristoxenus puts it this way (33.2–28):

Speaking generally, the science we are engaged in concerns all musical melody produced either by the voice or by instruments, and studying it requires two things, hearing and reason. With our hearing we distinguish the magnitudes (*megethē*) of intervals, and with our reason we perceive their functions (*dynameis*). Thus we must form the habit of distinguishing each ⟨interval⟩ with precision; for it is not like the custom with mathematical diagrams, where one says "let this be a straight line" — this sort of statement will not do when dealing with intervals. For the geometer does not use his faculty of perception at all: he does not habituate his eyesight to judge either straightness or circularity or any other such thing either poorly or well; rather, it is the carpenter and the woodworker and some other professions that are concerned with these things. But for the musical scientist (*mousikos*) the precision of his perception holds more or less the highest rank, since it is impossible for a person who

⁵ 20.9, 16; 21.13; 28.20 and 53.3.

perceives poorly to explain well those things that he does not perceive at all. This will be clear in our treatment of the subject itself.

By “hearing” (*akoē*) Aristoxenus evidently means not simply the sense by which we hear sounds, but trained musical perception: in his science it is the ultimate arbiter of what is well attuned. One of the foundations of Aristoxenus’ scientific method in the *Elementa harmonica* is that it is through the cooperation of this faculty with our reason (*dianoia*) that we grasp the well-attuned structures of music — that is to say, not just the relative sizes of individual musical intervals, but their functions within the melodies they occupy, and by extrapolation the acceptable combinations and arrangements of intervals out of which melodies may be constructed — or, to put it another way, out of which melody is constructed according to its nature.⁶ Applying Aristoxenus’ terminology (anachronistically, for the sake of an example) to the melodic structures of our music, we might say that it takes *akoē* to perceive that the first interval of “Happy Birthday” has the same magnitude as the first interval of “God Save the Queen,” but that it takes *dianoia* to recognize that the melodic function of this interval is not the same in both cases. We can tell this by where each melody goes next. Someone familiar with modern western music theory would describe this difference by saying that in “Happy Birthday” the interval in question is the tone between the dominant and submediant degrees of the major scale, whereas in “God Save the Queen” it is the tone between tonic and supertonic: same *megethos*; different *dynamis*. Aristoxenus’ articulation of the well-attuned structures of music is framed in these terms: how large or small the constituent intervals are, and what their function is within the wider whole (within their musical “scale,” in our terms).

Investigating the nature of melody thus requires a grasp of what Aristoxenus calls the “nature of attunement” (ἡ τοῦ ἡρμουςμένου φύσις).⁷ By “attunement” (τὸ ἡρμουςμένον)⁸ he seems to comprehend not only the accurate tuning of one note in relation to the next within an array of musically acceptable notes, but the selection and arrangement

⁶ See, e.g., 28.17–23. For a recent discussion of *akoē* and *dianoia* in Aristoxenus, see Barker (2007a) 65–6.

⁷ 41.29, 42.24 and 42.25.

⁸ 19.10, 38.24, 41.31 and 54.21.

of these notes as well.⁹ Grasping the nature of attunement involves, at the most basic level, recognizing the fundamental concords — the fourth, fifth and octave — as concordant, and knowing them by their magnitudes. Since magnitude must be discerned before function can be diagnosed (or, we could equally say, since the operations of perception — in this case narrowly quantifying operations — must precede those of reason), accurate perception of intervallic magnitudes is the necessary first stage in the investigation of “all musical melody produced either by the voice or by instruments.” Our understanding of the nature of melody thus relies on our understanding of the nature of attunement.

Attunement can be displayed schematically in what Aristoxenus calls a “system” (*systema*). A *systema* is an ordered series of melodically acceptable intervals, and it can be quite large (e.g., fourteen intervals spanning two octaves) or quite small (e.g., two intervals spanning less than a tone in combination, 24.30). The largest *systemata* were compounded from multiple iterations of a smaller *systema* called the tetrachord: four notes whose outer limits were tuned a perfect fourth apart, and whose two inner notes could be tuned in a variety of different ways. This variety was condensed by Aristoxenus and his predecessors into three “genera” (*genē*), called enharmonic, chromatic and diatonic (see figure 1). The last two of these genera also admitted several “shades” (*chroai* or *chrōmata*).¹⁰

3. Intervallic Commensurability and the Measurement of the Fourth

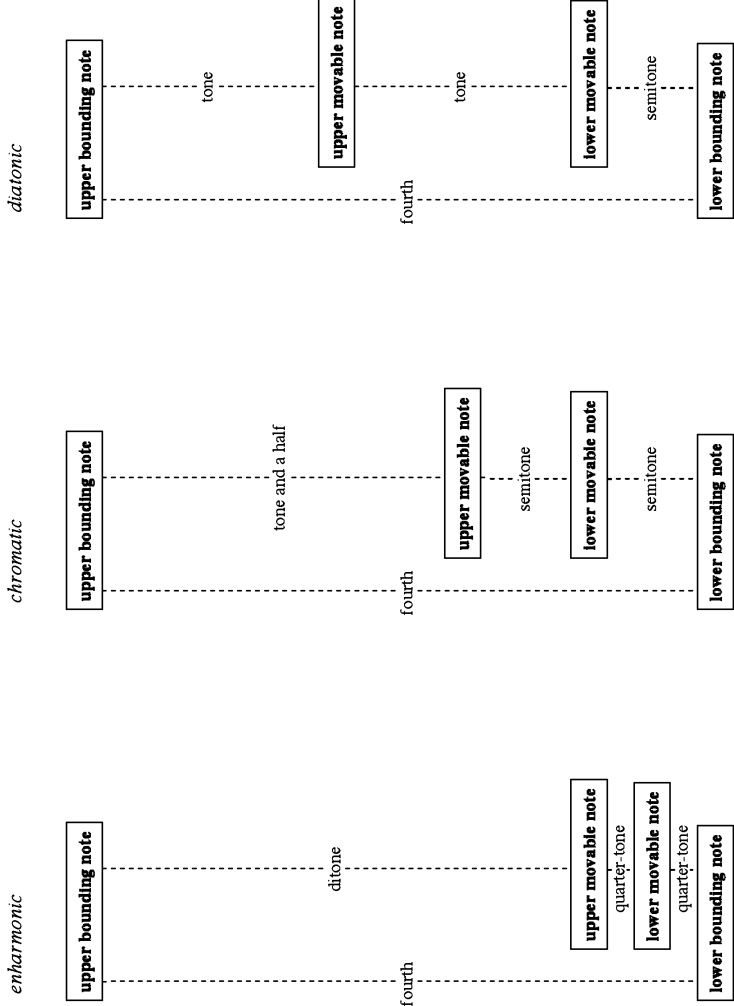
Because the tetrachord forms the basis of all the larger scale-systems, the interval of the fourth which bounds it is of prime structural importance not only as the smallest of the concords,¹¹ but also as a raw ingredient of melody and as a kind of stable musical “box” within which the variations that make up the different genera remain safely contained. For however the two inner notes are tuned, the outer bounding notes always stand a perfect fourth apart. It follows from this that the student of harmonics who wishes to define the various attunements

⁹ See, e.g., 53.33–54.21.

¹⁰ For a more detailed explanation of Greek scale-systems, see West (1992) ch. 6.

¹¹ 20.6–11 and 45.7–11. This is a point of agreement between Greek harmonic theorists of all persuasions.

Figure 1 A basic scheme of the tetrachord and its three genera. (The “shades” shown here are Aristoxenus’ tonic chromatic and tense diatonic.)



of the tetrachord precisely (one of the essential tasks of the science in Aristoxenus' view¹²) will require an accurate knowledge of how the fourth is measured by intervals smaller than itself.

A glance at figure 1 will suggest that this is unproblematic: the fourth is divisible into exactly five semitones, and because the semitone is commensurate with the fourth, it will be possible to describe the magnitude of any interval that could conceivably occur in a tetrachord simply and exactly in tones and fractions of a tone: the lowest interval in the enharmonic is a quarter-tone; the highest in the chromatic is a tone and a half, and so on. Aristoxenus is explicit about this commensurability in his definition of the tone and its parts in book 2 (45.34–46.8):

The tone is that by which the fifth is greater than the fourth; the fourth contains two and a half tones. Of the parts of the tone that are melodic, there is the half, which is called the semitone, and the third, which is called the smallest chromatic *diesis*, and the quarter, which is called the smallest enharmonic *diesis*; there is no melodic interval smaller than this.

There is a similar set of statements in book 1 (21.21–31).

In several other places, however, Aristoxenus seems to acknowledge that the commensurability on which he bases his quantified descriptions of the genera was not universally accepted by those interested in things to do with harmonics, and it is this disagreement that forms the background to the central issue I shall discuss in this chapter. Two passages in book 1 give the impression that Aristoxenus is aware of the controversy (24.4–10):

The question of how it is to be established whether the fourth is measured by some smaller interval or whether it is incommensurable with all of them is treated in our discussion of finding <intervals> through concords. But since it seems to be two and a half tones, let us assume (κρίσθω) that this is its magnitude.

In the other he describes the ditone as “either eight times the smallest [i.e., the enharmonic] *diesis*, or smaller than it by some utterly

¹² In book 2 Aristoxenus lists the task of distinguishing the genera as the first among seven parts of harmonic science (35.1–25; see esp. 20–5); its importance is also apparent in book 1 (4.25–8, 21.31–4).

minuscule and unmelodic interval” (28.14–5).¹³ And the way he introduces his “discussion of finding <intervals> through concords” in book 2 hints yet again that he was aware that the question of how (or whether) larger intervals are measured by smaller ones was not uncontroversial: “Among intervallic magnitudes, those of the concords seem either to be entirely without range — limited, that is, to one magnitude —, or to have a range of no more than a hair’s breadth, whereas this is so to a much lesser extent in the case of the discords” (55.3–7).¹⁴

Aristoxenus allows for the possibility that intervallic magnitudes may not be exactly as they seem (while simultaneously downplaying the perceptibility of any discrepancies involved) because there was another approach to harmonics, taken by Pythagoreans like Archytas of Tarentum, in which intervals were quantified very differently. “Those who investigate harmonics according to numbers,” as Aristotle referred to them,¹⁵ denied not only that the tone was commensurate with the fourth, the fifth and the octave, but also that it could be divided into exactly equal parts. One of their starting premises was that all musical intervals are expressible as ratios of numbers. This can be illustrated with a length of cylindrical pipe blocked at one end and blown across the other, like one of the tubes of a panpipe. The note that sounds when the whole pipe is blown will be an octave below the note that sounds when the pipe is blocked up to the halfway point.¹⁶ (A similar procedure with a length of stretched string and a movable

¹³ On the magnitude of the enharmonic *diesis*, see 45.34–46.8 (quoted above).

¹⁴ On all three passages, see Winnington-Ingram (1932) 199. It is possible that the second (28.14–15) should not be grouped with the other two in this context, since it does not concern the magnitude of a concord directly (see Barker [1989] 145 n. 118). But the mathematical harmonicist who applied Aristoxenus’ definitions of the intervals to his enharmonic genus (see figure 1) would have objected, nonetheless, that either the upper interval was smaller than a ditone, or that each of the lower intervals was smaller than a quarter-tone, since (in our terms) $(\sqrt[4]{(3:2 \div 4:3)})^2 \times (3:2 \div 4:3)^2 > 4:3$.

¹⁵ οἱ κατὰ τοὺς ἀριθμοὺς ἀρμονικοί, *Top.* 107a15–6.

¹⁶ This is (almost) the procedure Archytas uses in his account of the causes of pitched sound (fr. 1 = Porph. *in Harm.* 56.5–57.27 Düring, at 57.20–3); he — or perhaps Porphyry, who preserves the quotation — stops short of making the connection between ratios of length and magnitudes of interval. For text, translation and discussion of the fragment, see Huffman (2005) 103–61. Compare the similar but more explicitly quantified description, in the pseudo-Aristotelian *Problems* (19.23), of the procedure by which panpipes were tuned.

bridge will yield the same ratio, but none of the surviving accounts of such a demonstration can be securely dated before Aristoxenus.¹⁷) Because of the quantities of distance discoverable in the vibrating bodies which produce the notes, students of “mathematical harmonics” (Arist. *APo.* 79a1) saw doubleness as somehow inherent in (and not merely accidental to) the relationship of notes we call an octave. On this basis the octave interval itself can be called “duple” (2:1).¹⁸ Other intervals can be quantified similarly: the ratio of the fifth is 3:2, and that of the fourth 4:3. And just as a fourth combines with a fifth to make up an octave, the ratios of these intervals combine in a parallel arithmetical operation ($4:3 \times 3:2 = 2:1$). For those who adopted the mathematical approach to harmonics, their science was, therefore, a kind of arithmetic accessible to the ear, just as optics was a kind of geometry accessible to the eye (see e.g., Arist. *APo.* 75b12–7). The terms in which they set out the genera of the tetrachord were consequently very different from Aristoxenus’ (see figure 2 for a pre-Aristoxenian example).

Aristoxenus’ postulate that the magnitude of the fourth is two and a half tones brings him into immediate conflict with the mathematical harmonicists on two fronts.¹⁹ The first can be stated most simply in arithmetical terms. Although his starting premise that “the tone is that by which the fifth is greater than the fourth” (45.34–46.1) is one with which the mathematical theorists would have agreed (in their terms it amounted to saying that $3:2 \div 4:3 = 9:8$), his next clause, “the fourth contains two and a half tones” (46.1–2), cannot be mathematically true if the concords are tuned “pure” and the magnitude of the tone is consistent throughout the entire sentence.²⁰ For the tone that is “that

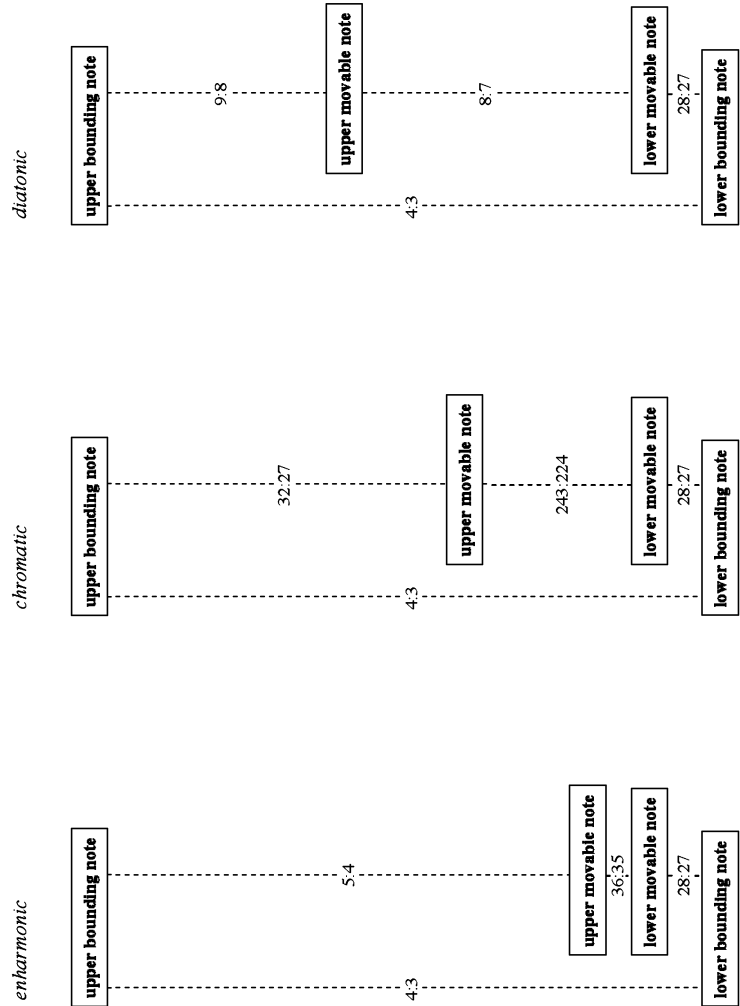
¹⁷ The early history of ratio demonstrations with strings is discussed in Creese (2010) ch. 3.

¹⁸ See, e.g., [Euc.] *Sect. Can.* prop. 12: “The octave interval is duple” (τὸ διὰ πασῶν διάστημα ἐστὶ διπλάσιον, 159.10 Jan).

¹⁹ Aristoxenus states the thesis as a postulate at 24.4–10, quoted above: note the verb κείσθω, for which Westphal proposed the emendation ὑποκείσθω (rejected by Macran and Da Rios).

²⁰ In pure concords (e.g., the open fifths on a well-tuned violin) no “beats” are audible between the two pitches. The fifths on a well-tuned piano are slightly smaller than pure fifths because the incommensurabilities identified by Greek mathematical harmonicists have been spread out evenly across each octave. All octaves are pure, but the fifths are smaller, and the fourths larger, than their “just” counterparts. Equal

Figure 2 Archytas' divisions of the tetrachord (Testimonium A16 Huffman).



by which the fifth is greater than the fourth" is in fact larger than the tone that goes into the fourth two and a half times (i.e., $(3:2 \div 4:3) > \sqrt[2]{4:3}$). Or, to put it another way, the fourth will not (quite) contain two and a half tones, if the tone has been defined as "that by which the fifth is greater than the fourth."²¹ The tone and the fourth are so nearly commensurable that under all but the most ideal conditions perception cannot detect the discrepancy, but to the harmonicist for whom the ratios are the true measure of intervallic magnitude, the fourth contained two tones and a leftover interval whose ratio comes out to 256:243. This "leftover" (*leimma*) is, of course, slightly smaller than half of a tone (i.e., $256:243 < \sqrt{9:8}$).²²

temperament is a modern response (one of several) to the anomalies in tuning that occur when an instrument whose pitches cannot be adjusted during performance is used to play a piece of music that contains both harmony (in the modern sense of the term) and modulation between several keys. The difference between pure and tempered concords is very slight, but audible to the trained ear. Since Aristoxenus offers no definition of concord, but simply takes it as a given that the musical ear is capable of identifying and tuning intervals which belong to this category, it is unlikely that the commensurability he postulates for the tone and the fourth was the product of tempering, which is an artificial distortion designed purposely to produce this result. On this issue see Winnington-Ingram (1932) 198–9.

²¹ This discrepancy could be expressed more simply as follows:

"the tone is that by which the fifth is greater than the fourth" (45.34–46.1),
and "the fourth contains two and a half tones" (46.1–2)

but $3:2 \div 4:3 = 9:8$

and $4:3 < (3:2 \div 4:3)^{2.5}$

∴ if "the tone is that by which the fifth is greater than the fourth,"
then the fourth does not contain two and a half tones
or the tone that is "that by which the fifth is greater than the fourth" is larger than
the tone that goes into the fourth two and a half times:
 $(3:2 \div 4:3) > \sqrt[2]{4:3}$

²² The two positions could be juxtaposed in this way:

the remainder of the fourth over the ditone is a semitone (57.4–15)

but $4:3 \div (9:8)^2 = 256:243$
and $256:243 < \sqrt{9:8}$

∴ the remainder of the fourth over the ditone is not a semitone

The 256:243 ratio of this interval is mentioned in the account of the harmonic construction of the world soul in Plato's *Timaeus* (36b).

The second point of conflict is the question of whether or not there can even be a half of a tone (or a quarter or a third, for that matter). Because one of the primary postulates of mathematical harmonics was that not just some but *all* musical intervals can be expressed as ratios of numbers, any relationship of notes which cannot be so expressed was not considered properly a musical interval at all, but merely a noise.²³ Once the ratio of the fifth has been established as 3:2 and that of the fourth 4:3, the ratio of their difference (9:8, the tone) will turn out to be impossible to divide into two or more exactly equal ratios of numbers (where “numbers” in the Greek sense means positive integers greater than the unit). A proof extending this impossibility to all ratios of this type $((n+1):n$ where $n > 1$, commonly called “epimoric”) is attributed to Archytas by Boethius;²⁴ in the *Sectio canonis* it is applied specifically to the tone (props. 3, 13, 16).²⁵

4. Principles versus Demonstrations

Aristoxenus’ postulate about how the tone measures the fourth appears to be vulnerable to an arithmetical checkmate: if the tone is the interval by which the fifth exceeds the fourth, as everyone agrees, then either Aristoxenus’ definition of the tone is inconsistent, or he has mistaken the *leimma* for a semitone; and in any case, there is no such thing as a semitone, properly speaking. But the king only falls if both players recognize the same rules, and near the beginning of book 2 Aristoxenus has explicitly excluded the crucial starting premises of mathematical harmonics from his account of the science, while establishing his criterion of perception as fundamental (32.17–28):

²³ See, e.g., Adrastus, quoted by Theon of Smyrna 50.14–19 Hiller.

²⁴ *De institutione musica* 3.11 = A19 Huffman (2005) 451–70.

²⁵ This can be summarized as follows:

since	the ratio of the tone (9:8) is epimoric (i.e., of the form $(n+1):n$ where $n > 1$),
	the ratio of the semitone ($\sqrt{9:8}$) cannot be expressed in <i>arithmoi</i> ,
because	there is no ratio of <i>arithmoi</i> C:D such that B:C::D:E when B:E is epimoric
∴	if all musical intervals are expressible in ratios of <i>arithmoi</i> ,
	then the semitone is not a musical interval.

We attempt to offer demonstrations (*apodeixeis*) of these things that correspond to the perceptual data (*phaenomena*), not the way our predecessors did, some of whom offered irrelevant explanations, shunning sense-perception as though it were imprecise, and constructed accounts of the causes intellectually. They asserted that it is certain ratios of numbers and speeds relative to one another that give rise to high and low pitch, giving accounts that are totally foreign to the purpose and completely in opposition to the sensory evidence (*phaenomena*).

So far from admitting checkmate, Aristoxenus contends in advance that his opponents are not even playing chess. Harmonics must remain focused on the *phaenomena*, not on their putative arithmetical underpinnings, and its investigator must advance demonstrations that are not in conflict with them. Aristoxenus does not attempt to deny that some correspondence between numerical ratios and musical intervals may appear to exist; he merely denies that explanations based on such a connection would still be relevant to the science of melody, something that exists only in the realm of perception. His insistence on the need for demonstrations that conform to the *phaenomena* may seem at first glance a point of commendable Aristotelian rigor, but it will not help him in the case before us, since the two-and-a-half-tone magnitude of the fourth has been adopted as a postulate based on perception, not as a proposition to be proven: it is one of those *archai* “which are all plain to those skilled in music” (32.32–4). Its status as such, and the methodological consequences of this status, are clear from the way Aristoxenus introduces it in book 2. After an extended introduction, which includes a list of the seven parts of the science of harmonics and a summary of two of the more egregious errors of his predecessors (30.9–43.24; one of these will concern us shortly), he prepares the ground for a list of harmonic principles with a statement of his method (43.25–44.20):

That, then, is the preliminary account one should give about the science called “harmonics.” But as we are about to undertake the investigation of its elements (*stoicheia*), we must first consider the following. We cannot complete the project properly unless three preconditions are satisfied which I am about to mention: first, that the perceptual data (*phaenomena*) have been adequately apprehended; next, that those among them which are prior have been correctly

distinguished from those which are contingent; and third, that both what follows from this and what is commonly agreed on have been duly considered together. Since for every scientific discipline which is put together from a multiplicity of propositions it is appropriate to assume first principles (*archai*) from among those things which can form the basis for demonstrations of what is dependent on first principles, we ought to assume such principles, paying attention to the following two conditions: firstly, that each of the propositions which have the nature of a principle is both true and evident, and secondly that they are of such a sort as to be comprehended by sense-perception as being among the first of the parts of harmonic science; for what requires a demonstration (*apodeixis*) of any kind does not have the nature of a first principle. In general, care should be taken at the outset so that we neither end up outside the boundaries of our discipline by adopting a preliminary conception of sound as a movement of the air, nor on the other hand by stopping short leave uninvestigated many of the things that do pertain to our science.

Aristoxenus proceeds immediately to the principles on which his later demonstrations will be based: “let it be proposed” (ἐκκείσθω, 44.24) that every melody will be either diatonic or chromatic or enharmonic, or a mixture of them; intervals are either concordant or discordant (44.28–30); “let there be” (ἔστω δὴ, 45.6) eight magnitudes of concords; the smallest and second-smallest concords are the fourth and fifth, and they combine to make an octave, the third-smallest concord; all magnitudes between these three concords are discordant (45.7–16); the combination of any concord with the octave is itself concordant (45.20–3); “the tone is that by which the fifth is greater than the fourth”; “the fourth contains two and a half tones”; the melodic parts of the tone are its half, third and quarter; the quarter-tone is the smallest *melodic* interval (45.34–46.8, quoted in full above), though “we assume” (ὑπολαμβάνομεν, 46.18) that in an absolute sense there is no smallest interval.²⁶

The status of the two-and-a-half-tone magnitude of the fourth as a first principle and, therefore, as indemonstrable is thus indicated both

²⁶ Compare the list of principles which concludes the extant part of what we know as book 1 (29.2–34), and the linguistic signposts of their status as such: ὑποκείσθω μὲν ... (29.2), ὑποκείσθω δὲ καὶ ... (29.6, 14, 23, 29), ... δὲ ὑποκείσθω (29.26), ἔστω (29.31).

in book 1, where it is explicitly derived from the evidence of perception (24.4–10), and in book 2, where it comes near the end of a list of principles which follow a detailed methodological statement emphasizing not only the need to distinguish what is prior from what is derivative, but also the role of perception in validating the principles of harmonics as both true and fundamental to the science. There is no room here for an arithmetical proof that $4:3 < (3:2 \div 4:3)^{2.5}$, but neither is there room for a demonstration that “the fourth contains two and a half tones”: the first statement has been ruled out as belonging to a class of arguments extraneous to harmonics;²⁷ the second has been adopted as an *archē* accepted by perception as fundamental, and “what requires a demonstration of any kind is not *archoeides*,” i.e., is not properly classified as a fundamental principle.²⁸

But the three passages I quoted above (24.4–10, 28.14–5, 55.3–7), in which Aristoxenus seems to allow that the strict commensurability of intervallic magnitudes he treats as axiomatic may not be acceptable as such to all harmonicists, show at best some less than total commitment to the truth and logical priority of the postulate, and at worst some degree of equivocation on the matter. What Winnington-Ingram called “the guilty conscience” is expressed differently in each context:²⁹ in the first case by postponing the question (thereby suggesting that the commensurability postulate is only provisional, and may turn out to be demonstrable after all, and consequently not actually a first principle), in the second by minimalizing the discrepancy in terms of both magnitude and function (the difference, if there is one, is both microscopic and melodically insignificant), and in the third by allowing that the concords may have some range (*topos*) rather than one fixed and unvarying magnitude, but if so a range no greater than a hair’s breadth (*παντελῶς ἀκαριαῖόν τινα*, 55.6).³⁰ Winnington-Ingram might have been right to interpret these allowances as signs of guilt, but one could as easily take them as gestures of argumentative

²⁷ By contrast, Aristotle’s own articulation of *apodeixis* in the sciences explicitly allowed a demonstration in arithmetic to be applied to harmonics (*APo.* 76a9–10, 23–5), because he conceived of harmonics not as an independent scientific domain but as subordinate to arithmetic (75b12–7).

²⁸ 44.14–5, quoted in full above; cf. *Arist. APo.* 71b26–9.

²⁹ Winnington-Ingram (1932) 199.

³⁰ With *ἀκαριαῖόν τινα* cf. the adjective *ἀκαρής*, which when used to describe hair means “too short to be cut” (LSJ s.v.).

generosity: the mathematical harmonicists may well have hit upon a mathematically relevant but musically irrelevant truth about the magnitudes of musical intervals. Grant them their argument, and it changes nothing about the nature of attunement because the difference is either imperceptible or virtually imperceptible to the musically trained ear. The limits of scientific relevance in harmonics must be set by perception, since whatever lies outside its capabilities will remain indemonstrable.³¹

If this is true, then it seems odd that Aristoxenus should appear to concede, when the mathematical theorists had not argued it, that the magnitudes of the concords might vary within some minute range. His thesis that the discords possess a much greater variation in magnitude would certainly suffice, from his perspective, to cover the discrepancy between his quantification of the magnitude of the fourth and that of the mathematical harmonicists, since the difference could be accounted for within the *topos* of either the semitone or the tone. If there is a range of magnitudes which the ear will apprehend as functionally equivalent to the tone, given the right melodic context,³² then one can say both that the tone is the difference between the fifth and the fourth, and that the fourth contains two and a half tones: the fact that the first of these tones is slightly larger than the second (or, alternatively, that this particular semitone is smaller than some others)

³¹ I take Aristoxenus' remark, in the introductory passage of book 2 quoted above, that accuracy of perception is essential to the *mousikos* because if his perception is poor he will not be able to "explain well those things which he does not perceive at all" (33.22–8), to be merely rhetorical hyperbole, since nowhere in his extant writings on harmonics does Aristoxenus appear to make a serious attempt to offer a good explanation (εὖ λέγειν) of imperceptibles. The possible *topos* within which a concord still sounds like a concord might count as something which the *mousikos* "does not perceive at all," but Aristoxenus nowhere attempts to give an account of it, and it is not at all certain that he thought the concords actually possess such a range. It is clear that according to the methodology he sets out in book 2 its mere existence, let alone its magnitude, will be impossible to demonstrate. (Barker [1989] 151 n. 14, noting the difficulty of this phrase, suggests that the things the *mousikos* "does not perceive at all" might be the *dynameis*, as opposed to the *megethē*: the functions of the notes and intervals within their melodies, as opposed to their magnitudes, since it is earlier in the same paragraph that Aristoxenus makes the distinction between intervallic magnitudes, which we assess with our ears, and intervallic functions, which we assess with our reason.)

³² See Barker (1989) 168 n. 110.

should now cause no concern. The *dynamis* of a single discord can be identified in more than one *megethos*. To imply, on the other hand, that the perception of concords might also follow this pattern to some infinitesimally small degree suggests a curious set of possible applications to the disagreement on the commensurability issue: that the fourth which is subdivided into two and a half tones is slightly (though perhaps not noticeably) larger than the fourth which is not so divided, for example, or that the octave one constructs by singing six tones in succession is slightly larger than the octave one arrives at by a single leap.³³ But if we apply Aristoxenus' concession about the magnitudes of the concords not to what he has said up to this point about the commensurability of the tone and the fourth, but to what he says in the discussion that follows, the notion of a possible but minute range of variation comes to look like a small but significant part of his argumentative strategy.

5. The Method of Concordance

The concession comes at the beginning of the passage in which he explains a method by which the student of harmonics can work around one of the areas where perception is at its weakest: the accurate construction of discords. The method relies on the construction of successive concords, something perception does much more confidently and reliably (55.7–12). Aristoxenus sets out the procedure using the following sample problem (55.13–23; see figure 3): say we are to construct a ditone below a given starting pitch J.³⁴ First take a fourth upwards to K, then a fifth downwards to L, then a fourth upwards to M, then a fifth downwards to N; the interval JN will be the ditone which it was required to construct. The same procedure can be followed in the opposite direction, he adds, if the problem is to construct a ditone upwards; it can also be used to find the remainder of the fourth once a ditone has been removed from it (55.23–56.12).³⁵

³³ On the incommensurability of the tone and the octave see *Sect. Can.* prop. 14.

³⁴ The letters and the diagram to which they refer are my additions.

³⁵ The “remainder” (τὸ λοιπόν) is a semitone, according to Aristoxenus' postulate, but he is careful not to use that term here. Aristoxenus presents the method of concordance as a theoretical construction, but it is, in fact, his adaptation of a practical method used to tune stringed instruments (Barker [1989] 50–1, 168 n. 111).

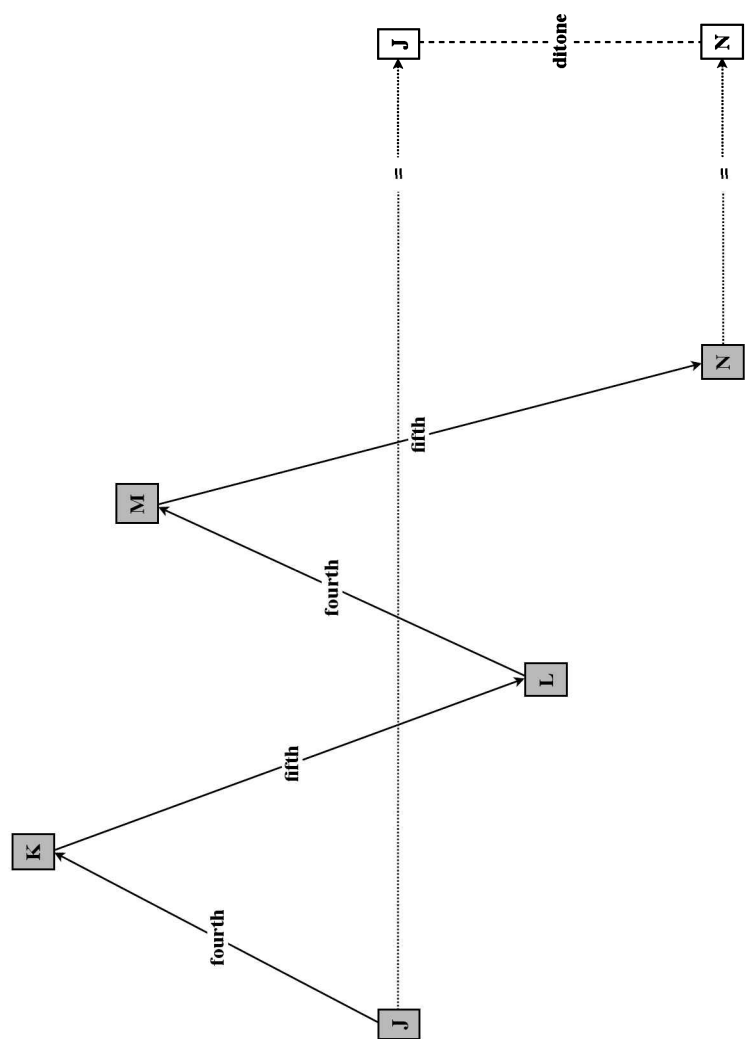
The discords will be constructed within a range of variation scarcely greater, at least theoretically, than those of the concords employed in the process.³⁶ Thus if the concords are in fact “limited to one magnitude,” then the discords generated by this “method of concordance” (*lēpsis dia symphōnias*) will also be determined, at least theoretically, to a single magnitude. That the method enables the student of harmonics at best to pinpoint a single magnitude for a given discord or at worst to find magnitudes that fall within a minuscule range of variation is the point of the procedure. Perception will identify a range of magnitudes as functionally equivalent to the ditone (for example), including some which are significantly larger or smaller than two tones; the fifth, by contrast, will be identified as such within either no range at all or one which is so slender as to be negligible. By using the invariability or virtual invariability of fifths and fourths to construct discords to a similar degree of invariability, Aristoxenus can call the method of concordance “the most exact method for determining a discordant interval” (55.11–12). But his admission of some possible range of variation in the magnitudes of the concords is no advantage here: it only diminishes the claim to precision he makes for the procedure. Consequently it seems that he did not introduce the concession for the sake of this procedure, but for another reason.

6. Precision and the Judgment of Perception

That other reason becomes apparent from the direction Aristoxenus takes next. The construction of ditones and remainders is not the end of his discussion of the method of concordance; rather, it appears to have been only a preliminary stage. Aristoxenus now puts this method to work in addressing the question of whether the fourth really does contain two and a half tones, as previously postulated, and this is the passage which concludes what in our texts is now book 2 of the *Elementa harmonica* (56.13–58.5). It begins as follows (56.13–57.3):

³⁶ If the concords do possess some range of variation, then the magnitude of the discord constructed in the course of the procedure can fall anywhere within a range as great as the greatest possible sum of minute differences that accumulate from one concord to the next as they are tuned in succession. How great a range this is depends entirely on how great a “hair’s breadth” one allows the concords.

Figure 3 The *lepsis dia symphōnias* (method of concordance) as described by Aristoxenus (*El. harm.* 55.13–23).



Whether it was correctly assumed at the outset that the fourth comprises two and a half tones can be subjected to scrutiny with the greatest precision in the following way. Let a fourth be taken [the interval PJ in figure 4],³⁷ and from each of its bounding notes let a ditone be marked off by means of concords [JN and PT]. It is clear that the intervals left over [TJ and NP] must be equal, since equals have been subtracted from equals. After this let a fourth be taken upwards [NY] from the lower limit [N] of the upper ditone [JN], and let another fourth be taken downwards [TX] from the upper limit [T] of the lower ditone [PT]. It is clear that lying next to each of the notes that bound the *systema* that has been produced [T and N] there will be two successive left-over intervals [TJ and JY; NP and PX] which must be equal for the reasons given above. And when these intervals have been constructed in this way, we must refer back to perception the outermost of the notes that have been determined [X and Y]. If they appear to be discordant, then it will be clear that the fourth is not made up of two and a half tones; but if they make the concord of a fifth, then it will be clear that the fourth is made up of two and a half tones.

Because he considers the musical ear most reliable in its judgment of concords, the procedure Aristoxenus suggests involves tuning twelve notes, each of which makes a concord with another note in the sequence. In this way he reduces the question to a simple aural judgment of one final interval (XY): if it is a perfectly tuned fifth, the postulate was correct; if not, the postulate was incorrect. Perception has the final judgment, under conditions that make the most of its capabilities.

Aristoxenus' concession that the concords might possess some minimal range of variation in their magnitudes seems difficult to explain in light of his emphasis on the precision of the results of this procedure: it is a method by which one may investigate the truth of a key postulate "most accurately" (*akribestata*). We are reminded of his insistence on the importance of accurate perception for the student of harmonics (33.2–28, quoted above). We might object that if it were possible to construct each successive concord within some small range acceptable to perception as accurate, the resulting fifth could then be out of tune by some multiple of these small variations, and the final "judgment of perception" might be that interval XY was not

³⁷ The letters and diagram are again my additions.

in fact a fifth, but something slightly larger or smaller. That this is not what Aristoxenus expects his reader to discover is clear from the way he continues (57.4–15):

For the lowest of the notes generated [X] was tuned to the concord of a fourth with the note [T] which formed the upper boundary of the lower ditone [PT], and it turned out that the highest of the notes generated [Y] was concordant with the lowest [X] at the fifth; consequently, since the remainder [TY] is a tone and is also divided into equal parts [TJ and JY], each of which is both a semitone and the remainder of the fourth [NY and PJ] over the ditone [JN and PT], it clearly follows that the fourth is made up of five semitones.

He concludes the passage by using a process of elimination to show that the concord that he has predicted his reader will have perceived between notes X and Y cannot be any other than the fifth (57.15–58.5).

Since the validation of the thesis that the fourth is equal to two and a half tones depends so completely on the ear's acceptance of interval XY as the concord of the fifth, it seems unhelpfully cavalier of Aristoxenus to have introduced even the shadow of a doubt about whether or not what perception identifies as a concord is limited to a single magnitude. It is only when we view the procedure from the point of view of the mathematical harmonicist that his concession begins to make argumentative sense. For the entire procedure can be done in numbers (see figure 5), and when we do it this way, the final interval XY comes out not as a fifth (3:2), but as something slightly smaller (262,144:177,147). The results of the entire calculation are by no means wholly in disagreement with the results Aristoxenus claims for his procedure (compare figure 5 with figure 4): the ditones (JN and PT, both $(9:8)^2 = 81:64$) are arithmetically equal to twice the interval between a fifth and a fourth; the ratios of the remainders TJ, JY, NP and PX are equal; note J divides interval TY into two ratios of equal magnitude. But because of the discrepancy between the arithmetical conclusion that $XY < 3:2$ and Aristoxenus' statement that "it turned out (συμβέβηκε) that the highest of the notes generated [Y] was concordant with the lowest [X] at the fifth" (57.7–9), other key elements of his argument which follow from this statement are in disagreement with corresponding elements of the arithmetical version of the procedure. He quantifies TY as a tone; by arithmetic it is smaller

(65,536:59,049). He says that intervals TJ and JY are semitones; by arithmetic they are the smaller *leimmata* (256:243). He concludes that the fourth is made up of five semitones; by arithmetic these five “semitones” will be a combination of three *leimmata* and two *apotomai* (2187:2048).³⁸

The shadow of a doubt about whether each concord is “limited to one magnitude” now appears argumentatively useful. A rival harmonist could present the mathematical content of figure 5 as a demonstration that the fourth is smaller than two and a half tones, and Aristoxenus could respond not only by repeating his claims that perception will identify interval XY as the concord of a fifth, that harmonic demonstrations must conform to the *phaenomena*, and that arguments based on ratios are extraneous to the science (32.17–28, quoted above), but also by adding that if there is some imperceptible difference between the magnitude of interval XY and those of the fifths used in the process of generating it, then he must have been right to suspect that the concords have a hair's-breadth range; XY and MN must both fall within this range, since perception (he would claim) identifies both of their magnitudes as “fifth.” This concession would then allow him to retain his conclusion that the fourth is equal to five semitones.

If this was the purpose for which Aristoxenus introduced his concession about the magnitudes of the concords, then it appears to serve him well insofar as it allows him to continue to assert the primacy of perception as the ultimate criterion in matters of attunement. But it does not save him from another objection. The magnitude by which a pure fifth is (arithmetically) greater than interval XY is more than a mere hair's breadth.³⁹ It is very nearly half the magnitude of Aristoxenus' smallest melodic interval, the enharmonic *diesis* or quarter-tone; it is greater than the difference between this interval and the next largest (the chromatic *diesis* or third-tone); and most significantly of all, it is exactly twice as large as the difference between two and a half tones and a perfect fourth. In other words, the final interval of the procedure by which Aristoxenus attempts to validate his thesis that the fourth contains two and a half tones is twice as far away from a true fifth as

³⁸ Take the five intervals that combine to make up the fourth NY, e.g.: NR = 2187:2048, RL = 256:243, LT = 2187:2048, TJ = 256:243, JY = 256:243; and $(2187:2048)^2 \times (256:243)^3 = 4:3$.

³⁹ The ratio of this excess ($3:2 \div 262,144:177,147$), which mathematical harmonists called the *komma*, is 531,441:524,288.

two and a half tones are from a true fourth. On this measurement at least, his procedure has only exacerbated the problem, in that it has magnified the discrepancy between the intervals arrived at by ratio-calculation and those arrived at by ear.

7. Methodological Ambiguity

What is curious, then, is Aristoxenus' evident confidence that the musical ear will identify interval XY as the concord of the fifth. For if note Y actually *is* flat by something greater than the difference by which a Greek musician could tell a third-tone from a quarter-tone, then it ought to sound so, especially since if the concords have any range of variation at all, according to Aristoxenus, it is less than those of discords, like the third-tone and quarter-tone. I do not mean to suggest that Aristoxenus knew that XY was not a fifth but still maintained that it was in the face of aural evidence to the contrary. He clearly believed that his procedure put the commensurability question to rest once and for all. But it is not easy to tell whether or not he ought to have been able to perceive the discrepancy. The difference between XY and a true fifth is small enough that its perceptibility will depend very much on practical aspects of the performance of the procedure, an issue on which Aristoxenus is oddly silent. "Let a fourth be taken," he says, "and from each of its bounding notes let a ditone be marked off by means of concords" (56.16–8), as though it did not matter how one sounded the notes and intervals. But it matters very much: to do the job accurately (and Aristoxenus makes repeated claims for the accuracy of the results), we will need one or more instruments which will allow us not only to tune each pitch with ease and precision, but also to listen to the entire array of pitches as many times as is necessary to ensure that the required intervals have been constructed as perfectly as we can manage. This is not a procedure the student of harmonics can perform to the required standard of accuracy by humming to himself in the quiet of his study, as a single attempt will make abundantly clear.⁴⁰

⁴⁰ The first of Aristoxenus' preconditions for the successful study of harmonics (43.32–3; the passage is quoted in full above) is connected to this issue. If the procedure is carried out without an instrument, there will be no way of ensuring "that the *phaenomena* have been adequately apprehended."

Nor can it be interpreted as a thought experiment, since it requires the active participation of our ears: “When these intervals have been constructed in this way, we must *refer back to perception* the outermost of the notes that have been determined” (56.30–3). Unlike a thought experiment, in which imagination alone suffices for us to fabricate, on the basis of experience, the likely result of the procedure, this one requires an assessment of audible pitches and not only invites the reader’s verdict on the matter, but stakes its credibility on that verdict. The commensurability question is condensed into a single aural judgment of two notes: “If they *appear to be discordant* (φανήσονται διάφωνοι), then it will be clear that the fourth is not made up of two and a half tones; but if they make the concord of a fifth (συμφωνήσουσι διὰ πέντε), then it will be clear that the fourth is made up of two and a half tones” (56.33–57.3). This is a task that lies outside the capabilities of the mind’s ear. A thought experiment does not need to be performable in reality in order to serve its argumentative purpose: if we were on the moon, says Aristotle,⁴¹ and observed an eclipse of the sun by the earth, we would know the fact of the eclipse but not the cause. One does not need to go to the moon to accept Aristotle’s argument, but one does need to hear interval XY to be convinced of Aristoxenus’ conclusion that the fourth is made up of two and a half tones.

The question of whether Aristoxenus ought to have been able to perceive that XY is smaller than a true fifth is, therefore, connected to three other questions: (1) what instrument he might have recommended to his reader for the performance of the procedure; (2) why he did not recommend one; and (3) what purpose, methodologically speaking, he thought the procedure was serving in his wider argument about the nature of attunement. For not only are his instructions impossible to follow adequately without an instrument, but the particular instrument one chooses to employ will have a significant effect on the precision with which interval XY can be constructed, and hence on one’s assessment of that interval and acceptance of the conclusion of the argument. Aristoxenus’ lack of instruction on this issue leaves his reader free to make practical choices that could lead him to a different conclusion than the one Aristoxenus treats as certain. The reader who followed the passage on an *aulos*, for example, might very well find

⁴¹ *APo.* 87b39–88a1; the context is the argument that we do not gain scientific knowledge by means of perception (οὐδὲ δι’ αἰσθήσεως ἔστιν ἐπίστασθαι, 87b28).

that the sort of pitch distortions which arise through differences in the pressure of lips and breath could produce several different versions of interval XY, not all of which were a well-tuned fifth. The instability of the instrument's pitch-production and the fact that one cannot go back at the end and check the first intervals in the series without re-creating them from scratch could lead to potential uncertainty about the inevitability of the conclusion.

This possibility exposes the fact that the procedure is not a demonstration, properly speaking. If it were, it would attempt to present the five-semitone fourth as a necessary conclusion entailed by an unchallengeable series of logical steps that began at first principles. Instead, the key step is left up to the reader's perception, and the answer is then taken for granted: "if they [X and Y] make the concord of a fifth" is followed almost immediately by "*it turned out* (συμβέβηκε) that the highest of the notes generated [Y] was concordant with the lowest [X] at the fifth." Reason does not reveal that it turned out this way, and Aristoxenus does not attempt to prove that perception must necessarily confirm this result. Rather, he bases the rest of his argument on the unsupported statement that this is how it turned out when perception was allowed to judge the question. The closest thing to a demonstration in the passage is the final argument that XY, having been declared a concord, cannot be any concord but the fifth (57.15–58.5).

Nevertheless, the passage has often been read as a demonstration.⁴² It is true that it contains elements of the language of mathematical *apodeixis*, most notably the perfect passive imperative verb forms employed in the construction itself (e.g., εἰλήφθω γὰρ τὸ διὰ τεσσάρων, "for let a fourth have been taken"; ἀφορίσθω δίτονον, "let a ditone have been marked off") and second-order statements such as "it is clear that" (δῆλον δὲ ὅτι and φανερόν δὲ ὅτι).⁴³ But the necessary involvement of perception in the midst of the procedure,

⁴² Macran (1902) 286 (whose summary of the passage with modern musical notation [286–7] reads like the demonstration he takes it to be); Da Rios (1954) 79–80 (who, in her summary of the passage [80 n. 1], goes so far as to add a concluding QED which is not in Aristoxenus' text: "come volevasi dimostrare"); Litchfield (1988) 61–4; Mathiesen (1999) 329. Gibson (2005) is more cautious, calling it both "an extensive 'proof' that the fourth is two and a half tones" (66) and "an empirical procedure for assessing" the thesis (68).

⁴³ On the formulaic language of Greek mathematical demonstration, see esp. Netz (1999) 133–44.

not to confirm a result that was dictated by reason but to provide sensory evidence to reason so that the argument can be continued, effectively removes the procedure from the realm of demonstration.⁴⁴ On the other hand, it may not deserve to be called an experiment, even though it contains one essential element that is clearly empirical.⁴⁵

It is difficult to tell how Aristoxenus thought the procedure fit into his method and what purpose he thought it served in his wider argument about the nature of attunement. His adoption of the two-and-a-half-tone fourth as a principle on the basis of perception puts it in a class of things that will not be demonstrated, like the assumption that all intervals are either concordant or discordant (44.28–30). But since none of his other principles apparently warranted extra attention, it seems clear that this was a special case. It was special not just because according to a rival approach to harmonics it was false, but because Aristoxenus' adoption of it as a principle placed it at a methodological disadvantage when its truth was challenged. For mathematical harmonicists could (and did⁴⁶) present their counter-argument as a demonstration. For them the incommensurability of the tone and the fourth was not a first principle but a demonstrable fact.⁴⁷ Aristoxenus could not both retain his postulate as a principle and prove its truth by demonstration, since to demonstrate it would be to admit that it did not qualify as a principle. Instead, he claimed that unlike his predecessors, he would attempt to provide demonstrations that conform to the *phaenomena*: in other words, he attempted to invalidate the arithmetical demonstration on the grounds that its conclusion is not supported by the evidence of perception. He then provided a methodologically ambiguous procedure in which the commensurability postulate could be reassessed by perception in a new intervallic context.

⁴⁴ See also Barker (1989) 170 n. 114.

⁴⁵ Pace Mathiesen, who calls it “neither mathematical nor empirical” (1999) 329. Winnington-Ingram did not think much of it: “an experiment, if it can be dignified by such a name” (1932) 199.

⁴⁶ *Sect. Can.* prop. 15. The *Sectio* is probably to be dated after Aristoxenus, but Gibson (2005) 212 n. 16 has suggested that the procedure which now stands at the end of *Harm.* bk. 2 might have been written as a response to the *Sectio*. If it was, it certainly was not a very good one.

⁴⁷ Such a demonstration will rest on five basic principles: that (1) intervals are in ratios of numbers; (2) the ratio of the octave is 2:1; (3) the ratio of the fifth is 3:2; (4) a fifth and a fourth combine to make an octave; and (5) the tone is the excess of a fifth over a fourth.

The methodological ambiguity of the procedure deserves some emphasis. Aristoxenus introduces the passage with a verb that seems calculated to present what follows as neither overtly apodeictic nor overtly experimental in character: “*one may investigate* (ἐξετάσειεν ἄν τις) whether it was correctly postulated” that the fourth is two and a half tones (56.13–7). He does not say ἀποδείξειεν ἄν, for example, or πειράσσαιτ' ἄν: but ἐξετάζειν means both “to examine closely” and also “to prove by scrutiny or test,” as gold is proven.⁴⁸ His choice of verb, therefore, allows him to present the procedure as part of a persuasive argument, but it also helps him to avoid making methodological implications about its precise role within the wider context of that argument.

8. No Instruments Please, We're Harmonicists

Even if he is (intentionally) vague about his methodology in the passage, Aristoxenus' intention to persuade his reader of the truth of his commensurability postulate is abundantly clear. The reader who attempts to follow the passage closely will then discover that the method requires the use of an instrument, and that the result depends on the qualities of the instrument as much as it does on his own musical perception. We have seen that Aristoxenus does not mention this: although his account is detailed, it avoids instrumental terminology altogether. But some instrument will necessarily be part of the apparatus of persuasion even though Aristoxenus is silent on the point. The *aulos*, as I have suggested above, would not be an ideal instrument to use. Panpipes would give better pitch stability, but more than one would be needed and the possibility of distortion from overblowing would still be a factor, not to mention the fact that tuning each pipe is considerably more laborious than placing one's fingers over the appropriate *aulos*-holes.⁴⁹ Because of their relative ease of tuning and stability of pitch, stringed instruments will be the most appropriate instrumental accessory to the method. There are a handful of possibilities:⁵⁰ a harp would perhaps be ideal, since with its many strings

⁴⁸ LSJ s.v.

⁴⁹ Depictions of the *syrinx* (panpipes) in Greek art of the classical period usually show seven constituent pipes (Bundrick [2005] 42). Tuning was done by means of wax plugs, which shortened each pipe to the correct speaking length (see n. 16 above).

⁵⁰ I am concerned here only with possibilities available to Aristoxenus' ancient

it could accommodate all twelve pitches;⁵¹ otherwise a pair of lyres, kitharas or *barbitoi* would do.⁵²

Even the best musical ear, aided by stringed instruments of the best possible quality, will introduce a certain amount of cumulative tuning error into the procedure; the final interval XY is the result, after all, of eleven successive tunings, whether one starts with J or P. But on repeated attempts under the best conditions, the average construction of XY will sound like a badly tuned fifth. It sounds badly tuned, of course, because it is: the mathematical harmonicists were right about its magnitude even though they were apparently unable to prove it in terms Aristoxenus would have accepted.⁵³

It seems far more likely that Aristoxenus did not try out the procedure for himself (or did not try it out under optimal conditions) than that he was deliberately attempting to fudge the result. For not only would that explain the absence of practical detail from his presentation of it in a way that did not cast doubt on his scientific honesty, it would also fit well with the things he does say about the place of instruments in harmonics. I mentioned earlier that at the end of the introduction to book 2 Aristoxenus takes time to summarize and comment on two of the worst of his predecessors' errors (39.4–43.24). The first of these is

reader. Note that a modern piano, properly tuned, will mislead the ear, since by equal temperament all its fifths are slightly smaller, and all its fourths slightly larger, than their pure counterparts (see n. 20 above).

⁵¹ Harps are mentioned in Greek literature from the late sixth century BCE: Pi. *ap.* Ath. 635d-e; Hdt. 1.17.1; Alc. 36.5; Sapph. 22.11 and 156.

⁵² Most fourth-century depictions of these lyre-type instruments show fewer than twelve strings (seven and eight are most common: for examples, see Paquette 1984 and Maas and Snyder 1989), but twelve-stringed lyres are not unheard of: see, e.g., Pherecrates fr. 155.25 (the kitharode Timotheus and his twelve strings) and Berlin Antiqu. 8519 (a bronze mirror, c. 350 BCE, on which is depicted a twelve-stringed lyre: West [1992] 63).

⁵³ The monochord is often mentioned as an instrument on which Aristoxenus' procedure can be performed arithmetically without sacrificing the confirmation of perception (see, e.g., Litchfield [1988] 64, Mathiesen [1999] 329). There is no good evidence that can be used to date the monochord as early as Aristoxenus, but it is not impossible that the first demonstrations were being carried out with it during his lifetime (Creese [2010] ch. 2). If Aristoxenus had encountered the instrument, it is hard to imagine that he would have failed to recognize its usefulness as a means of refuting the conclusion he draws from his procedure. For a critique of Aristoxenus' argument by a harmonicist for whom the monochord was an essential instrumental resource, see Ptol. *Harm.* 1.10 (the monochord is introduced in 1.8).

that the goal of harmonics is notating melodies, the second that it is the study of *auloi*. By the time he has dealt with the first, he has managed to work himself up into a state of high indignation, and the proponents of *aulos*-based harmonics are in for scathing treatment (41.24–43.9):

No less absurd than this is the notion concerning *auloi*. The greatest and most absurd of mistakes is to derive the nature of attunement from an instrument. For it is not on account of any of the properties that belong to instruments that what is well tuned is the way it is, or possesses the order that it does. It is not because the *aulos* has finger-holes and bores and other things of this kind, nor is it because it involves the use of the hands and of other parts through which raising and lowering of pitch naturally come about, that the fourth or the fifth or the octave sound concordant, or each of the other intervals receives its appropriate magnitude. For even with all these things, auletes nevertheless fail completely to obtain the order of attunement most of the time, and the <intervals> they do get right are few even when they do all these things, even when they separate <the pipes> and bring them back together again, and sharpen and flatten <notes> with their breath, and apply other similar techniques. Hence clearly it is equally wrong to say that what is well tuned resides in *auloi* as it is to say that what is badly tuned resides in them. But if in fact it were any use to derive attunement from an instrument, this should not be the case. For then, a melody would only need to be referred to the *auloi* and instantly it would be unfailingly correct and free of error. In fact, however, neither *auloi* nor any other instrument will ever establish the nature of attunement, for each of the instruments partakes to the best of its ability in a wonderful overarching order, namely that of the nature of attunement, with perception acting as overseer of what is referred to it — both these matters and everything else to do with music. If anyone thinks, because he sees that the finger-holes are the same every day, and the strings are stretched to the same tension, that because of this he will find attunement remaining constantly in them and retaining the same order, he is completely foolish. For just as attunement is not in the strings unless someone introduces it manually by tuning, neither is it in the finger-holes unless someone introduces it manually by tuning. For it is obvious and clearly does not need pointing out that none of the instruments tunes itself, but that perception is the authority over this.

This is not the first time in book 2 that Aristoxenus has mentioned predecessors of his who were concerned with instruments. One group

gets some grudging recognition for having recognized the existence of all three genera, even though they apparently did not analyze them carefully; Aristoxenus lists what they missed (and it is quite a bit: 35.8–20). Another group appears to have based at least some of their groupings or definitions of harmonic structures on the properties of some *auloi*, and Aristoxenus criticizes them for their unreasoned approach (37.24–38.2).⁵⁴ This second group may also be the target of the lengthy passage I have just quoted, in which Aristoxenus articulates more clearly and in greater detail why deriving the nature of attunement from instruments amounts to putting the cart before the horse. His argument in this passage, although directed (it seems) at people who tried to explain aspects of attunement on the basis of the physical construction of *auloi*, goes well beyond its starting point in defining with some care the relationship of instruments generally to the nature of attunement as a whole. The nature of attunement, he says, will not be established by any instrument. It works the other way round: instruments participate in the nature of attunement according to their natural properties and the abilities of those who use them. And this is where we come up against a serious problem. In the passage just quoted, Aristoxenus claims that “the greatest and most absurd of mistakes is to derive the nature of attunement from an instrument,” and that “neither *auloi* nor any other instrument will ever establish the nature of attunement,” but by the end of book 2 he has attempted to validate the truth of a key postulate about the nature of attunement by means of a procedure that not only requires an instrument, but which was derived from the practice by which musical performers tuned their stringed instruments.⁵⁵

It would have been bad enough if, having first denied instruments a role in determining the nature of attunement, he had then explicitly entrusted an argument about the nature of attunement to an instrument. What is worse is that if a reader who had followed the procedure at the end of book 2 diligently and repeatedly on a stringed instrument reported to Aristoxenus that under the best possible conditions the supposed fifth XY sounded consistently out of tune, Aristoxenus could reply that his reader should not have tried to make the nature of

⁵⁴ The structures in question are *tonoi*, roughly analogous to “keys.”

⁵⁵ See n. 35 above.

harmonic attunement depend on an instrument. By focusing his attention solely on the intervals of the procedure, Aristoxenus attempts to keep attunement separate from the instruments that can be made to possess it (however briefly or imperfectly). Then if interval XY does not sound concordant, there is the possibility that this is the result of error introduced by the investigator, since “attunement is not in the strings unless someone introduces it manually by tuning,” and “none of the instruments tunes itself.” This, then, would also be Aristoxenus’ defense against the charge of methodological inconsistency: if “perception is the authority,” then the aural judgment of interval XY, on which the reader is to stake his belief in an essential element of the nature of attunement, depends not on an instrument but on the attunement which he brings to it “with perception acting as overseer.” The instrument is merely the place-holder as perception goes about its constructive tasks. It is imperfect; it only participates “to the best of its ability” in the nature of attunement, and both its imperfections and those of the person who uses it contribute to the level of inaccuracy it transmits to perception.

9. Conclusion

The questions this apparent discrepancy raises are not about how interested Aristoxenus was in instruments (he is reported, for instance, to have written a book about drilling *auloi*),⁵⁶ but rather about how he thought instruments could be used in harmonic argument.⁵⁷ If all of his tetrachordal divisions were built on a postulate that he believed could be most reliably confirmed for perception by means of an instrumental procedure, then we ought to conclude by considering the ways in which instruments, as tools of persuasion, are related to perception and harmonic argument in Aristoxenus’ conception of his science.

To do this, let us return to the passage in which Aristoxenus compares the use of perception in harmonics and geometry (33.2–28,

⁵⁶ Fr. 94–102 Wehrli (Περὶ ὀργάνων, Περὶ αὐλῶν, Περὶ αὐλητῶν, Περὶ αὐλῶν τρήσεως). Athenaeus reproduces a list of five types of *auloi* from the first book of Aristoxenus’ treatise on *aulos*-drilling (634e = fr. 101).

⁵⁷ In a passage in book 1 (11.3–21) he uses an instrumental example to illustrate the causal connection between tension (ἐπίτασις) and high pitch (ὀξύτης). No instrument is named, but the reference to strings is explicit and stands by analogy, implicitly, for the vocal chords and their movements.

quoted in full above). Having defined the roles of hearing and reason in harmonics, he continues (33.9–26):

Thus we must form the habit of distinguishing each <interval> with precision; for it is not like the custom with mathematical diagrams, where one says “let this be a straight line” (ἔστω τοῦτο εὐθεῖα γραμμή)⁵⁸ — this sort of statement will not do when dealing with intervals. For the geometer does not use his faculty of perception at all: he does not habituate his eyesight to judge either straightness or circularity or any other such thing either poorly or well; rather, it is the carpenter and the woodworker and some other professions that are concerned with these things. But for the musical scientist (*mousikos*) the precision of his perception holds more or less the highest rank, since it is impossible for a person who perceives poorly to explain well those things that he does not perceive at all.

On one level, harmonics is not like geometry, because even when a geometrical proof makes use of perceptible things (lines drawn in diagrams), the proof itself does not rely on their perceptibility or even the precision of their execution.⁵⁹ On another level, however, harmonics is not like carpentry, either. For even though accuracy of perception matters to the carpenter in a way that it does not matter to the geometer despite the fact that their constructions are based on many of the same mathematical truths, it is not a part of carpentry to give demonstrations of these facts. The carpenter’s use of perception is more like that of the performing musician, who likewise relies on it to make well-tuned melody, but for whom proofs are equally unnecessary. This places the harmonicist by himself: he tries to offer demonstrations about matters to do with attunement, but he also requires the use of well-trained perception. Unlike the carpenter, whose relationship to his tools and instruments is an essential factor in the shape and quality of his constructions, the harmonicist must train his perception without basing his arguments about the nature of attunement on the qualities

⁵⁸ Ready examples can be found in the Aristotelian *Mechanica* (ἔστω γὰρ εὐθεῖα, 848b28) and Euclid’s *Elements* (ἔστω εὐθεῖα ἡ AB, 6.27.7, 10.59.32 and 13.4.5; ἔστω ἡ δοθεῖσα εὐθεῖα ἡ AB, 1.46.2, 2.11.4, 3.33.3 and 6.9.2; ἔστω ἡ μὲν δοθεῖσα εὐθεῖα ἡ AB, 1.11.3, 1.23.4, 1.44.4, 6.18.3, 6.28.7, 6.29.4, 11.26.3 and 11.27.4; ἔστω ἡ δοθεῖσα εὐθεῖα πεπερασμένη ἡ AB, 1.1.3 and 1.10.2).

⁵⁹ On geometrical diagrams, see especially Netz (1999). The different status of diagrams in mathematical harmonics is discussed in Creese (2010) ch. 1.

of the instruments available to him. But his relationship to instruments must be like the carpenter's insofar as he uses them to make harmonic constructions conform to their ideal nature by means of perception.

The procedure at the end of book 2 requires a carpenter-like harmonicist: one who has trained his perception to the point where he can rely on it both for the construction of a harmonic structure and for the assessment of one of the relationships between its parts. He must also be able to tell when inaccuracies have appeared in his constructions due to the properties of his instruments, and correct them. Faced with the procedure for confirming the two-and-a-half-tone fourth, however, this carpenter-like harmonicist would find himself unable to accept Aristoxenus' conclusion, because the tone is no more commensurable with the fourth than the diameter of a circle is with its circumference.

I have tried to show that the passage which concludes book 2 of the *Elementa harmonica* is worth reading in light of questions about how instruments and empiricism are connected in Aristoxenus' harmonics. One of the central problems of the passage arises from the fact that he hands over the reins to his reader's perception at the critical moment, when reason needs to be informed of a fact accessible only to perception. This fact must be accurately perceived, and so the empirical aspect of the procedure is what necessitates the reader's use of an instrument. By avoiding empiricism altogether, Aristoxenus could have kept clear of the potential accusation of having tacitly entrusted an argument about the nature of attunement to an instrument, when by his own argument no instrument can establish the nature of attunement. But since a demonstration of the commensurability postulate would have invalidated its status as a principle, the judgment of his reader's ear is what allows Aristoxenus to return to the question without either undermining his own method or admitting that the mathematical harmonicists had been right after all. His failure to mention that his reader will need an instrument is not the result of disinterest in instruments, but a reflection of his concern to give priority to the nature of attunement itself, rather than the material objects in which attunement may temporarily reside. Since for Aristoxenus the nature of attunement is something that reason cannot grasp without the assistance of perception, the direct involvement of perception in the process of persuasion is essential.

3

Aristoxenus and Musical *Ēthos*

Eleonora Rocconi

1. Introduction

Traditionally regarded as the major musical authority of the ancient world (and hence simply called “the musician”), the Peripatetic philosopher Aristoxenus of Tarentum is especially known for his technical writings on music theory, which were of outstanding importance in classical antiquity for the development of the field. As a matter of fact, his two most extensive surviving works are the *Elementa Harmonica* (whose description of musical structures as combinations of conjoined and disjoined tetrachords to form larger arrangements, such as the “Great Perfect System,” is the earliest full account of an extensive scalar system in antiquity) and the *Elementa Rhythmica* (where, for the first time, musical rhythm is described as something independent and not inherent in the syllabic structure, thanks to the reference to a minimal time-length to which the performer will match each of his notes, the *prōtos chronos*).¹

¹ The most recent editions of these treatises are Da Rios (1954) and Pearson (1990). All the translations of ancient Greek texts quoted within the paper are (unless otherwise indicated) from Barker (1984) and Barker (1989).

According to the other surviving titles and fragments, however, Aristoxenus' interests in music (besides his wider interests in the history of philosophy and the biography of philosophers) concerned many other topics, such as organology (*On Auloi*, fr. 100 Wehrli; *On the Boring of Auloi*, fr. 101 Wehrli; *On Instruments*, fr. 102 Wehrli), dance (*On Tragic Dancing*, fr. 104–6 Wehrli; *Comparisons*, fr. 109 Wehrli)² and, more generally, the history of music (*On Music*, fr. 80–90 Wehrli). His production of ethical and political writings (*Educational Nomoi*, *Political Nomoi*, *Customs of Mantineans*, fr. 42–6 Wehrli), together with some references to affinities between music and the human soul (fr. 119–21 Wehrli) and to the role played by musical education in the improvement of character (fr. 123 Wehrli) in some extant fragments of his lost works, lead modern scholars to suppose that Aristoxenus, like many other philosophers of antiquity, attributed a great educational value to music. Hence, since in ancient Greek culture the *ēthos* theory of music (that is, the belief that music could influence the “character” of those who hear it and the development of theoretical principles on which such a power was based) was strictly linked to educational and political themes, such evidence is of great importance for the reconstruction of his approach to this topic.

An interest in musical education and in the role played by it in forming good Greek citizens, in fact, seems to have been at the base of a biographical event in Aristoxenus' life, that is, of his stay in Mantinea, in Arcadia (whence he moved to Corinth and then to Athens), probably around 350 BCE.³ According to Polybius, indeed, still in the 3rd century BCE Arcadians attributed a great “psychagogic” (i.e., “leading” or “persuading souls”) and, consequently, educational and civic power to music:

The practice of music, I mean real music, is beneficial (ὄφελος) to all men, but to Arcadians it is a necessity (ἀναγκαῖον) ... we should not think that ... the early Arcadians had no good reason for incorporating music in their whole public life to such an extent

² The third title *On Choruses*, which is found in Wehrli's collection of the Aristoxenian fragments über Tänze, is a deduction of the editor and not directly attested, as Elisabetta Matelli pointed out in her paper at this same conference.

³ On the controversial dating of Aristoxenus' stay in Mantinea, see Visconti (1999) 64–5.

that not only boys, but young men up to the age of thirty were compelled to study it constantly... . Besides this the young men practice military parades to the music of the *aulos* and perfect themselves in dances and give annual performances in the theatres, all under state supervision and at the public expense (μετὰ κοινῆς ἐπιστροφῆς καὶ δαπάνης) (Plb. 4.20, transl. in Paton [1922]).

This information is echoed in one of the Aristoxenian sections of the pseudo-Plutarchan *On Music* (see *infra*, §2), where it is stated that the Spartans, the Mantineans and the Pellenians “used to pick up just one [musical] *tropos*,⁴ or a very small number, which they believed to be suited to the proper formation of character (πρὸς τὴν τῶν ἡθῶν ἐπανόρθωσιν), and practiced that sort of music alone” (*De mus.* 32 1142e). Aristoxenus’ journey to Mantinea, therefore, may have had just the purpose of getting in contact with and delving into the ethical and sociopolitical aspects of the Arcadian musical practice, leading him to write one, or perhaps two works dedicated to the city: the Μαντινέων ἔθῃ and the Μαντινέων ἐγκώμιον (fr. 45, 1 Wehrli).⁵

Before tackling the problems raised by the other Aristoxenian fragments which are presumably concerned with ethical matters, however, it is necessary to retrace the relations and affinities of Aristoxenus with the main philosophical traditions preceding him which speculated on the psychagogic power of music, i.e., the Pythagoreans, Plato and the Peripatetic school, including his master Aristotle.

2. The Theory of Musical *Ēthos* before Aristoxenus

In ancient Greek culture, the belief that music could influence the human soul is very old; long before becoming explicit in philosophical writings, it is emblematically attested to also by musical myths, such as the one concerning the mythical bard Orpheus who, through the sweetness of his melodies, was able to charm and placate elements of the natural world.

The first elaboration of a musical therapy based on precise correspondences between melodies and rhythms, on the one hand, and specific human habits and affections, on the other (which came to be

⁴ According to Barker’s comment on this passage (1984) 239 n. 213, the term *tropos* here means a “technically specifiable melodic genre.”

⁵ See Visconti (1999) 78–99, esp. 88.

called “the *ethos* theory of music” by modern scholars),⁶ is usually ascribed to the Pythagoreans, even if the scarcity of information concerning early Pythagoreanism makes the reconstruction in detail of such an old tradition on the basis of late sources controversial. As a matter of fact, the main evidence for such a reconstruction is found in Iamblichus’ *On the Pythagorean Life* (3rd–4th cent. CE), whose several sources have not yet been identified with absolute certainty, so that we have no secure proof that this work reflects early Pythagorean practices. According to Iamblichus (or to his source), Pythagoras “corrected” (ἐπανορθούμενος) psychic and physical *pathē*, bringing them back to virtue (πρὸς ἀρετήν) through the most suitable music (VP 64, cf. the “correction of human characters and lives through music,” τὴν διὰ τῆς μουσικῆς τῶν ἀνθρωπίνων ἡθῶν τε καὶ βίων ἐπανόρθωσιν quoted in chs. 114–15 of the same work). Within this conceptual system, the efficacy of music on psychic and physical diseases (if really practiced) could probably find its roots in the affinities recognized by the Pythagoreans between music and the human soul, since both take part in the universal *harmonia*.⁷

The most ancient and authoritative source on the psychagogic power of music, however, is Plato, who deals with the education of the soul through music quite extensively (though in slightly different ways) in two of his works: the *Republic* and the *Laws*.⁸ In a famous passage of the *Republic* (398d–400d), he relies on the authority of Damon of Oa, the adviser to Pericles, as the musical expert to be deferred to concerning the details of the musical selection for the education of the guardians, focusing on the social and political consequences of such musical choices: “styles of music (μουσικῆς τρόποι) are nowhere altered without change in the greatest laws of the city: so Damon says, and I concur” (Plato, *Rep.* 424c). According

⁶ As indicated by the titles of the most famous books on the subject, Abert (1899) and Anderson (1966).

⁷ The doctrine that the soul is a harmony is usually ascribed to Pythagoreans, more specifically to Philolaus, based on the evidence of Macrobius (DK 44A23), who perhaps relied on the doctrine presented by Simmias (described as a pupil of Philolaus) in Plato’s *Phaedo*. On this controversial argument see Huffman (1993) 323–32, and, more generally, Huffman (2009).

⁸ Although in both works the Platonic view on music is ethically loaded, in the *Laws* musical education pays considerable attention to the notion of “pleasure” (ἡδονή), which exercises a certain influence on the irrational part of the soul.

to his view (which it would be misleading to trace back entirely, as it appears in his writings, to the shadowy figure of Damon),⁹ affinities between musical structures and types of characters, virtues and vices may be explained through the mimetic quality of music, which is able to represent moral qualities by means of words, rhythm and melody.¹⁰ Therefore, the human soul may be naturally affected by music. In fact, the soul, though not identifiable as *harmonia*,¹¹ nevertheless “pos-sesses” it, and hence has structural analogies with musical tunings:

A man must not suffer the principles in his soul to do each the work of some other and interfere and meddle with one another, but ... he should dispose well of what in the true sense of the word is properly his own, and having first attained to self-mastery and beautiful order within himself, and having harmonized (συναρμόσαντα) these three principles, as we usually do with the three boundaries of the musical *harmonia*, i.e., the lowest (νεάτη), the highest (ὑπάτη) and the middle (μέση), and all others there may be between them, and having linked and bound all three together and made of himself a unit, one man instead of many, self-controlled and in unison (ἡρμοσμένον), he should then and then only turn to practice ... (*Rep.* 443d-e, transl. adapted from Shorey [1930]).

In the *Laws* (655a-d), Plato restates that what is said, sung or represented through music and dance (μελωδηθέντα ἢ χορευθέντα)¹² should imitate a good (καλόν) model, since καλὰ σχήματα (good postures) and καλὰ μέλη (good melodies) are a vehicle to lead people

⁹ According to some recent interpretations — see Barker (2007) 252 n. 29 — the so-called “Damonian theory of musical *ēthos*,” according to which Damon came to be traditionally regarded as the one who theoretically codified the attribution of peculiar *ēthē* to tunings and rhythmical patterns, is a formulation of modern scholars, which overstates the ancient evidence (the most important of which comes from Plato himself).

¹⁰ In the *Republic* (400a), rhythms are defined as βίου μιμήματα and it is said that “we must make the foot and the melody follow the words proper to (an orderly and courageous) life.” See also *Laws* 655d, according to which “what is involved in choric performance is imitations of characters (μιμήματα τρώπων), appearing in actions and eventualities of all kinds which each performer goes through by means of habits and imitations.”

¹¹ Cf. Plat. *Phd.* 94e–95a: Οὐκ ἄρα, ὦ ἄριστε, ἡμῖν οὐδαμῇ καλῶς ἔχει ψυχὴν ἁρμονίαν τινὰ φάναι εἶναι.

¹² According to Plat. *Laws* 654b, *choreia* is the practice of both choral dancing and singing: Χορεία γε μὴν ὀρχησῖς τε καὶ ᾠδῇ τὸ σύνολόν ἐστιν.

to good dispositions of the soul, such as courage (ἀνδρεία) and temperance (σωφροσύνη). For this reason, the musical practices in the city should be closely controlled and regulated, and the people in charge of such a task should receive suitable training for being able to judge correctly.¹³

For Aristotle, music is regarded as something that may have functions other than education (παιδεία), such as amusement (παιδιά), intellectual enjoyment (διαγωγή) and purification (κάθαρσις).¹⁴ Hence there is no need, as there is in Plato (who categorically excluded the usage of some *harmoniai* and rhythms), for a ban on any particular type of music, since “all the *harmoniai* should be used, but not all of them in the same way” (*Pol.* 1342a1–2); moral, active and inspirational (ἠθικά, πρακτικά and ἐνθουσιαστικά) melodies are all allowed as long as they are used in their most appropriate context.

Moreover music, being naturally among the things that give delight,¹⁵ is outstandingly useful in education because it is capable of creating a particular quality of character in the soul more than any other art,¹⁶ and it is an extraordinarily effective means of doing so, thanks to the fact that “there seems to be a close relation of some sort between the soul and *harmoniai* and rhythms, which is why many wise men say either that the soul is a *harmonia*, or that it contains one.”¹⁷ According to this view, which seems to be clarified by a passage in the pseudo-Aristotelian *Problems* (19.27), “what is heard, alone among perceptibles, has moral character (τὸ ἀκουστὸν μόνον ἦθος ἔχει τῶν αἰσθητῶν) ... because it alone has movement (κίνησιν ἔχει

¹³ In the *Laws* (670a-b), Plato says that those in charge of such a judgment (that is, the chorus of elders, who are supposed to be the arbiters of musical and moral taste in the community) must have “both acute perception and understanding of rhythms and *harmoniai*” and “understand correctness in melodies, the correctness of the Dorian *harmonia*, for example.”

¹⁴ Arist. *Pol.* 1339b13–4; *ibid.* 1341b38.

¹⁵ Arist. *Pol.* 1340b16–7: ἡ δὲ μουσικὴ φύσει τῶν ἡδυσμάτων ἐστίν.

¹⁶ Arist. *Pol.* 1340b10ff.: ἐκ μὲν οὖν τούτων φανερόν ὅτι δύναται ποιόν τι τὸ τῆς ψυχῆς ἦθος ἡ μουσικὴ παρασκευάζειν.

¹⁷ Arist. *Pol.* 1340b17ff.: καὶ τις ἔοικε συγγένεια ταῖς ἀρμονίαις καὶ τοῖς ῥυθμοῖς εἶναι· διὸ πολλοὶ φασὶ τῶν σοφῶν οἱ μὲν ἀρμονίαν εἶναι τὴν ψυχὴν, οἱ δ' ἔχειν ἀρμονίαν. The theory which identifies harmony and soul (quoted by Aristotle also in *de An.* 407b30ff.) is usually thought to be Pythagorean. On the controversies regarding this interpretation, see n. 7.

μόνον),”¹⁸ that is, because music, uniquely among the arts, displays itself over time (a remark which will be of central importance also in Aristoxenian thought).¹⁹ It is through the movement of their elements in performance that “melodies” (μέλη) — and not simply arrangements of notes or rhythms — become likenesses (ὁμοιώματα)²⁰ or imitations (μιμήματα)²¹ of characters.

The Peripatetic tradition continued on the belief that the musical elements are able to affect the human soul (or, at least, part of it);²² in addition, Theophrastus, Aristotle’s successor as head of the Lyceum, seems to have had a lively interest in musical therapy.²³ Maybe as a consequence of this presumption, the subject of musical education became quite popular among such philosophers; in the *Politics*, Aristotle explicitly bases his remarks on the authority of “those philosophers who are well versed on musical education” (*Pol.* 1341b29; see also *Pol.* 1340b5–6 and 1342a31–2). Among them, we should probably include Heraclides of Pontus who, as far as we know, applied the Aristotelian notion of “what is appropriate” (τὸ πρέπον) to musical

¹⁸ *Pr.* 19.27: “But we perceive the movement that follows upon a sound of this kind. This movement has likeness both in rhythms and in the ordering of high and low notes, though not in their mixture: a concord has no moral character. This character does not exist in any other perceptibles. But the movements themselves are related to action, and actions are indications of character” (αἱ δὲ κινήσεις αὐταὶ πρακτικαὶ εἰσιν, αἱ δὲ πράξεις ἡθονος σημασία ἐστίν). On this passage see Barker (2005) 108ff.

¹⁹ Aristox. *Harm.* 38.31–2, p. 48.13–4 Da Rios: “it is in a process of coming to be (ἐν γενέσει) that melody consists, as do all the other parts of music.”

²⁰ Arist. *Pol.* 1340a18–21: ἔστι δὲ ὁμοιώματα μάλιστα παρὰ τὰς ἀληθινὰς φύσεις ἐν τοῖς ὁρθοῖς καὶ τοῖς μέλεσιν ὀργῆς καὶ πραότητος, ἔτι δ’ ἀνδρείας καὶ σωφροσύνης καὶ πάντων τῶν ἐναντίων τούτοις καὶ τῶν ἄλλων ἡθῶν.

²¹ Arist. *Pol.* 1340a38–9: ἐν δὲ τοῖς μέλεσιν αὐτοῖς ἔστι μιμήματα τῶν ἡθῶν.

²² Recently, Woerther (2008) 99 pointed out that, in Aristotle, music influences no longer, as in Plato, the *psychē* as a whole, but just one part of it, that is, its *ēthos*, which “designates that part of the desiring soul which, being irrational by nature, nevertheless has a share in reason to the extent that it takes reason into account” (cf. Arist. *EE* 1220b5–7). More generally, on the Aristotelian concept of *ēthos*, see Woerther (2007).

²³ According to ancient evidence, we know that Theophrastus, though adopting a quite controversial position on the possibility of a musical contribution to virtue (cf. fr. 720 and 724 FHS&G, on which see Barker [2005] 131ff.), attributed to music the power of curing psychic and physical illnesses. On this see Thphr. fr. 726a FHS&G: ἐν τῷ Περί ἐνθουσιασμῶν ... φησὶ ... τὴν μουσικὴν πολλὰ τῶν ἐπὶ ψυχῇ καὶ τῷ σώματι γιγνομένων παθῶν ἰατροῦν καθάπερ λιποθυμίαν φόβους καὶ τὰς ἐπὶ μακρὸν γιγνομένας τῆς διανοίας ἐκστάσεις.

structures²⁴ as well as Aristoxenus himself, who — according to Strabo — described musicians as “educators” (παιδευτικοί) and “correctors of characters” (ἐπανορθωτικοί τῶν ἡθῶν).²⁵

Therefore, Aristoxenian interests in musical ethics may be set within a consolidated philosophical tradition that, if we exclude a few isolated exceptions,²⁶ looks basically unanimous in attributing psychagogic (and, consequently, educational) powers to music. More specifically, we know that Aristoxenus was quite well acquainted with most of these doctrines. Concerning Pythagoreanism, we should remember his philosophical background. Before becoming one of the most prominent of Aristotle’s pupils, he was first, in his native Tarentum, student of his father Spintharus (who, as far as we know, seems to have had connections to the Pythagorean community in his city)²⁷ and then, at Athens, of the Pythagorean Xenophilos. This Pythagorean training is echoed in some of his (lost) writings: Aristoxenus is, after Aristotle, the second most important early source for Pythagoreanism (and one of the most significant concerning its usage of musical therapy),²⁸ being

²⁴ Heraclid. Pont. fr. 162 Wehrli = fr. 115a Schütrumpf (*apud* Phld. *Mus.* 4, PHerc. 1497, col. 49.1ff. Delattre): “... after taking note of some of the things said, in what (Heraclides wrote) concerning appropriate and inappropriate melody (περὶ πρέποντος μέλους καὶ ἀπρεπούς), and about masculine and effeminate characters ...” (transl. in Schütrumpf, Stork, van Ophuijsen and Prince [2008]).

²⁵ Str. 1.2.3 = Aristox. fr. 123 Wehrli: “Why even the musicians, when they give instruction in singing, in lyre-playing, or in *aulos*-playing, lay claim to this virtue, for they maintain that these studies tend to discipline and correct the character (οἱ μουσικοὶ ... παιδευτικοὶ γὰρ εἶναι φασὶ καὶ ἐπανορθωτικοὶ τῶν ἡθῶν). You may hear this contention made not merely by the Pythagoreans, but Aristoxenus also declares the same thing.”

²⁶ Aristotle, in the *Politics*, seems to present the ethical power of music as a controversial issue at his time: see 1339a41–2 (“The same problem arises if music has the power to improve character...”) and 1340a5–6 (“... and we ... ought also to see whether it has a tendency to improve the character and the soul”). The first explicit rejection of the theory of musical *ēthos* comes from a papyrus fragment of doubtful dating (maybe the early 4th cent. BCE), the Hibeh Papyrus I.13. Cf. also the position of Democritus who, to the educational value of music, opposed a purely hedonistic view.

²⁷ Spintharus was also called Mnēsiās by the sources, a nickname that some scholars think derived from the verb *mimnēskō* (“to remember”), according to the widespread habit, among Pythagoreans, of using epithets related to the sphere of memory. On this topic see Visconti (2000) and, more extensively, Visconti (1999) 36–63.

²⁸ Cramer *Anecd. Paris.* 1.172 = Aristox. fr. 26 Wehrli: ὅτι οἱ Πυθαγορικοί, ὡς ἔφη Ἀριστόξενος, καθάρσει ἐχρῶντο τοῦ μὲν σώματος διὰ τῆς ἰατρικῆς, τῆς δὲ ψυχῆς διὰ τῆς μουσικῆς. See also Str. 1.2.3 = Aristox. fr. 123 Wehrli, cit. n. 25.

author of at least three works concerning ancient Pythagoreanism, on which later sources²⁹ may well have relied: *On Pythagoras and His Associates*, *On the Pythagorean Life*, and *The Pythagorean Precepts*.³⁰

Moreover, in the first twenty years of his life in Tarentum, he may have had direct experience of the *bios pythagorikos* through the intellectual and political figure of Archytas (whose biography, later written by Aristoxenus, illustrates his many virtues). Such a philosopher, “the most dedicated to the study of music” (as Ptolemy points out in *Harm.* 1.13, p. 30.9 Düring), may have exemplified for him the possibility of the coexistence of musical interests and political activity, which led many Greek *poleis* to integrate music into the educational system, and may have been the spark which encouraged him to look for concrete examples of such usage of music (as in the case of the Arcadian Mantinea discussed above).

Furthermore, some Latin sources associate Aristoxenus’ conception of the soul with the Pythagorean one, describing it as a musical *harmonia*:

... for if either the heart, or the blood, or the brain, is the soul, then certainly the soul, being corporeal, must perish with the rest of the body; if it is air, it will perhaps be dissolved; if it is fire, it will be extinguished; if it is Aristoxenus’ harmony, it will be put out of tune (*si est Aristoxeni harmonia, dissolvetur*). What shall I say of Dicaearchus, who denies that there is any soul?³¹

But what I have said as to the heart, the blood, the brain, air, or fire being the soul, are common opinions: the others are only entertained by individuals; and, indeed, there were many among the ancients who held singular opinions on this subject, of whom the latest was Aristoxenus, a man who was both a musician and a philosopher (*musicus idemque philosophus*). He maintained a certain straining of the body, like what is called harmony in music, to be the soul (*velut in cantu et fidibus quae ἀρμονία dicitur*), and believed that, from the figure and nature of the whole body, various motions are excited, as sounds are from an instrument. He adhered steadily to his

²⁹ E.g., Iamblichus’ *On the Pythagorean Life* and Porphyry’s *Life of Pythagoras*.

³⁰ Aristoxenian attention to ethical questions is clearly attested by the Πυθαγορικά ἀποφάσεις which, as Huffman (2008) has recently demonstrated, were a summary of Pythagorean ethics as taught in the fourth century BCE.

³¹ Cic. *Tusc.* 1.11.24 = Aristox. fr. 119 Wehrli. The translations of Cicero’s text are from Yonge (1877).

system, and yet he said something, the nature of which, whatever it was, had been detailed and explained a great while before by Plato.³²

We will pass over Dicaearchus, with his contemporary and fellow-disciple Aristoxenus, both indeed men of learning. One of them seems never even to have been affected with grief, as he could not perceive that he had a soul; while the other is so pleased with his musical compositions that he endeavors to show an analogy betwixt them and souls (*alter ita delectatur suis cantibus, ut eos etiam ad haec transferre conetur*). Now, we may understand harmony to arise from the intervals of sounds, whose various compositions occasion many harmonies; but I do not see how a disposition of members, and the figure of a body without a soul, can occasion harmony. He had better, learned as he is, leave these speculations to his master Aristotle, and follow his own trade as a musician.³³

... and I did not refuse to weave hidden numbers even into limbs: also Aristoxenus and Pythagoras give evidence of this (*membris quoque latentes interserere numeros non contempsit; hos etiam Aristoxenus Pythagorasque testantur*).³⁴

As far as Plato is concerned, Aristoxenus seems to have had no great reverence for the philosopher, as demonstrated by the fragments surviving from the biography he devoted to him, where Plato is criticized both as a philosopher and as a politician (fr. 61–8 Wehrli).³⁵

³² Cic. *Tusc.* 1.10.19 = Aristox. fr. 120a Wehrli. A late reference to a kind of agreement between the Aristoxenian and the Platonic conception of the soul is in F. Gaffurio *Theorica musica* 1.3.5 (late 15th cent. CE): *Nostra igitur anima cuius omnis compago musica est cum harmonia cognationem habet. Plato nanque et Aristoxenus ex his quibus omnis harmonia contextitur numeris animam ipsam conflauere.*

³³ Cic. *Tusc.* 1.18.41 = Aristox. fr. 120b Wehrli.

³⁴ Mart. Cap. *De nupt.* 9.924–5 = Aristox. fr. 121 Wehrli. In Cic. *Tusc.* 1.22.51 (= fr. 118 Wehrli), Aristoxenus is associated with Dicaearchus concerning the denial of the existence of the soul: this statement is probably to be intended as a polemic from Cicero. On the (supposed) Aristoxenian conception of soul see Bélis (1985); on the hypothesis that Cicero had at his disposal the Aristoxenian texts, together with Aristotle's library, which arrived in Rome after the Sack of Athens by Sulla in 86 BCE, see Donadi (2000) 19.

³⁵ On the hostility toward figures like Plato and Socrates, several interpretations have been suggested: among them see Cassio-Musti (1991) 10, and Isnardi Parente (1991) 151 and 159. For a fuller understanding of Aristoxenus' biographical reports on Plato, see Dillon's paper in this volume.

Aristoxenus apparently disagreed with him also concerning ethical questions related to music. As far as the selection of musical structures for educational and civic purposes is concerned, in fact, he seems to have criticized Plato, attributing his rejection of the Mixolydian and the relaxed Lydian *harmoniai* — the one described as “mournful” (θρηνηδική), the other as “dissipated” (ἐκκελυμένη) — to his ignorance of the fact that they could also be of use to a well-ordered state:

Since one of these *harmoniai* is mournful and the other dissipated, it was only to be expected that Plato would reject them, and select Dorian as being appropriate for warlike and temperate men. This was certainly not, as Aristoxenus claims in the second book of his work *On Music*, because Plato was ignorant of the fact that the other two *harmoniai* can also be of use to a well-ordered state (ὅτι καὶ ἐν ἐκείναις — sc. ἀρμονίαις — τι χρήσιμον ἦν πρὸς πολιτείαν φυλακικὴν).³⁶

According to the most common interpretation of this passage, then, it seems that the Aristoxenian position with regard to the acceptance of many different *harmoniai* in civic life was not as strict as Plato’s (and hence closer to Aristotle’s position): but it is also possible³⁷ to interpret this sentence as a clumsy way of saying that Aristoxenus “agreed” that Plato was not ignorant that other *harmoniai* could be used for the good of the state and that, maybe, he failed to appreciate their social value for other reasons.

The evidence we have discussed so far gives us interesting information about the relationship between Aristoxenus and the previous philosophical tradition concerning the ethical and, consequently, educational and social role of music in ancient Greek culture. Such information, however, does not suffice to outline an organic and coherent picture of the Aristoxenian concept of musical *ēthos*. In order to do that (or to attempt to do it), we should now turn our attention to a more extended Aristoxenian passage which deals with this topic, handed down in a treatise of the Imperial period (already mentioned in our discussion above), mainly devoted to the subject of musical education: the pseudo-Plutarchan *On Music*.

³⁶ ps.-Plut. *De mus.* 17 1136e-f = Aristox. fr. 82 Wehrli.

³⁷ As Barker does in his paper on Aristoxenus and the Academy in this volume.

3. Musical *Ēthos* according to Aristoxenus

The most important source for a (at least partial) reconstruction of Aristoxenus' conception of musical *ēthos* is ps.-Plutarch's *On Music*, ch. 31–6 (1142b–1144e),³⁸ a treatise assembled in the Plutarchan age by a compiler who, without originality, quotes and paraphrases much earlier sources (among which are Plato, Aristotle and Aristoxenus). This part of the dialogue (imagined as a fictional table-talk among learned men on the history of Greek music and its utility in education) focuses attention on the subject of musical *paideia*, carrying on the discourse about the degeneration of “modern”³⁹ music started by the speakers some chapters before. Soterichus of Alexandria — one of the two musical experts invited by the host Onesicrates — opens this section of the dialogue by relying just on Aristoxenus' authority to state that training and teaching in music are fundamental to the “correction” (διόρθωσις) or “distortion” (διαστροφή) of musical principles inspired by the ancient tradition.⁴⁰

Among the technical branches of learning on which *mousikē paideia* is based, the first to be discussed is harmonic science, whose definition is clearly based on the Aristoxenian model:

Thus Harmonics, for instance, is the science of the genera of melodic order, of intervals, *systemata*, notes, *tonoi* and modulations between *systemata*, and it is unable to advance beyond this point. Hence we cannot seek to discover through harmonics whether the composer — in the *Mysians*,⁴¹ for example — has made an appropriate choice in using the Hypodorian *tonos* at the beginning, Dorian at

³⁸ Even if, in Wehrli's collection, fr. 76 stops at the end of ch. 31 (1142c), from the subject-matters and terminology employed in this section of the treatise we can reasonably infer that, from here to — at least — 1144e, the source continues to be Aristoxenus, or a later writing based upon a genuine Aristoxenian source: on this hypothesis see Rocconi (2005) and Barker (2007) 235ff.

³⁹ The term “modern,” as elsewhere in the treatise, is to be understood with reference to the 5th–4th century BCE, that is to say to the approximate dating of many of the ps.-Plutarchan sources.

⁴⁰ *De mus.* 31 1142b: “It is made clear by Aristoxenus that correct or distorted practice (διόρθωσις ἢ διαστροφή) has its source in training and teaching (παρὰ τὰς ἀγωγὰς καὶ τὰς μαθήσεις).”

⁴¹ Most probably a fourth-century dithyramb (if Bergk's conjecture *Mysians* for *mousois* or *mousais* of the MSS here is correct). The same piece is ascribed to the composer Philoxenus of Cythera (5th–4th cent. BCE) by Arist. *Pol.* 1342b.

the end, and Hypophrygian and Phrygian in the middle. The science of Harmonics does not extend to such matters, and requires supplementation from many sources, since it has no understanding of the nature of appropriateness (ἡ ἀρμονικὴ πραγματεία ... τὴν γὰρ τῆς οἰκειότητος δύναμιν ἀγνοεῖ). Thus neither the chromatic nor the enharmonic genus carries with it the whole nature of what it is to be appropriate, through which the moral character of a musical composition is revealed (καθ' ἣν τὸ τοῦ πεποιημένου μέλους ἦθος ἐπιφαίνεται): this is the task of the practitioner of the art (τοῦτο τοῦ τεχνίτου ἔργον). It is clear that the sound of a *systēma* is different from that of a composition constructed within that *systēma*, and the study of the latter is not within the scope of the science of Harmonics. The same may be said of rhythms... . (*De mus.* 33 1142f–1143a)⁴²

Technical knowledge of musical disciplines is treated by this Aristoxenian source as insufficient to enable us to acquire the capacity of musical judgment on the character (ἦθος) of a musical composition: “Our remarks have thus been sufficient to show that neither Harmonics nor Rhythmics nor any of the other sciences which are treated as dealing with a single element of the subject is capable on its own both of understanding the character (καθ' αὐτὴν τοῦ ἦθους εἶναι διαγνωστική) and of judging the other elements (τῶν ἄλλων κριτική)” (*De mus.* 33 1143d–e). Challenging the traditional theory according to which each distinguishable element of a musical composition (such as *harmoniai* or rhythms) is assigned an *ēthos* of its own, Aristoxenus (or his epigone) proposes here the alternative thesis that the character of a piece, instead, arises from the ways in which melodic and rhythmic elements are associated with each other by the musician in *melopoiia* (i.e., “musical composition”).⁴³ A close link

⁴² Cf. Aristox. *Harm.* 1.16ff., p. 5.6ff. Da Rios: “The study called Harmonics ... is the study of first principles, which include whatever is relevant to an understanding of *systēmata* and *tonoi*. ... Matters investigated at a higher level, where the science of composition makes use (χρωμένης ἤδη τῆς ποιητικῆς) of *systēmata* and *tonoi*, no longer belong to this science, but to the one which includes both this and the others through which all musical matters are investigated: and that is the science whose possession makes a man a musical expert (μουσικός).”

⁴³ The inclusion or not of *melopoiia* among the topics to be treated by the Harmonics is a controversial question, since, if in the so-called first book of the *Elementa harmonica* it seems to be excluded (*Harm.* 2.1–6, p. 6.1–5 Da Rios), the opening of book 2 states that it is in melodic composition that Harmonics reaches its goal (*telos*): ...

between *melopoiia* and *ēthos* is pointed out also by other Aristoxenian sources:

These people ... have misunderstood what we said in our public lectures (ἐν ταῖς δειξέσει): that we are trying ... to make each of the *melopoiiai* (ὅτι πειρώμεθα ποιεῖν τῶν μελοποιῶν ἐκάστην), and in general that one kind of music damages the characters (βλάπτει τὰ ἦθη) while another kind benefits (ὠφελεῖ) it (Aristox. *Harm.* 31.22–6, pp. 40.1–41.1 Da Rios).⁴⁴

Melodic composition is the capacity for constructing melody (μελοποιία δὲ δύναμις κατασκευαστικὴ μέλους). It is divided into *hypatoidēs*, *mesoeidēs* and *netoeidēs* [i.e., into a low, intermediate and high range], corresponding to the characteristic properties of sound that we mentioned previously. Its parts are selection (λήψις), mixture (μίξις) and use (χρήσις). ... Use is the production of a melody in a particular way (χρήσις δὲ ἡ ποῖα τῆς μελωδίας ἀπεργασία). It in turn has three forms, consecution (ἀγωγή), distribution (πεττεία) and interweaving (πλοκή). ... Distribution is that through which we understand which notes should be omitted and which used, and how often in the case of each of them, and from which we should begin and on which we should end. It is distribution that determines the “character” of the melody (αὕτη δὲ καὶ τοῦ ἦθους γίνεται παραστατικὴ) (Arist. Quint. *De mus.* 1.12, pp. 28.10–29.21 W.-I., cf. *ibid.* 2.14, p. 80.6ff. W.-I.).⁴⁵

καλοῦμεν δὲ τοῦτο μελοποιάν. ἡ μὲν οὖν περὶ τὸ ἡρμωσμένον πραγματεία διὰ τῶν εἰρημένων μερῶν πορευθεῖσα τοιοῦτον λήψεται τέλος (*ibid.* 38.17–26, p. 48.4–10 Da Rios). Regarding this, we should remember that the conventional division of Aristoxenus’ most important treatise into three books has nowadays become almost unanimously rejected thanks to the correct reading, in the earliest manuscripts, of its title as “Before the (πρὸ τῶν) *Elementa harmonica*,” corrupted throughout the manuscript tradition to “The first book (πρῶτον) of the *Elementa harmonica*” (Mathiesen [1999] 295ff.). This might suggest that book 1 of the *Elementa harmonica*, as also its generic content seems to show, belongs to a separate and more introductory work (perhaps the *Περὶ ἀρχῶν* quoted by Porphyry), while the traditional book 2 is probably the original beginning of the *Elementa*; hence the inconsistencies among different sections concerning the eventual inclusion of *melopoiia*.

⁴⁴ Transl. Barker (2007) 231. On the interpretation of the words *melopoiiai* (here as “styles of composition”) and *poiein* (“to make, to create”) and on the implications suggested by this passage concerning the purposes of harmonic science, see the discussion in Barker (2007) 230–3.

⁴⁵ According to most scholars, this section of Aristides Quintilianus’ treatise (which

According to this view, the μελοποιία — defined as the “putting in usage (χρῆσις) of the parts of Harmonics which we have dealt with [i.e., genera, intervals, notes, *systemata*, *tonoi*, modulation] and which are its foundations”⁴⁶ — plays a fundamental role in building the *ēthos* of a particular musical form, going well beyond the choice of a single scale or *harmonia*. As Aristoxenus points out, if “many forms of melody, of all sorts, come into existence in notes which are themselves the same and unchanging, it is clear that this variety depends on the use to which the notes are put [or, to use Aristides Quintilianus’ words, on their “distribution”/πεττεία]: and this is what we call melodic composition,”⁴⁷ because “it is clear that the sound of a *systema* is different from that of a composition constructed within that *systema*.”⁴⁸ (Of course, nobody today would state that *Frère Jacques* and Beethoven’s Symphony no. 1 display the same character just because they are both written in the key of C major!)

In the same passage of the ps.-Plutarchan text, the author clarifies how the source (αἰτία) of the *ēthos* of a musical composition lies in its “mixture” of elements: “our view is that the cause of *ēthos* is a particular kind of *combination* (σύνθεσιν τινα) or *mixture* (μίξιν) or both” (*De mus.* 33 1143a-b).⁴⁹ The terminology here — as often in Aristoxenus — is clearly Aristotelian, even if the two terms are perhaps hastily summarized and equated by the compiler (or by his intermediate source) and it is likely that, in the original discussion, they meant two specific and slightly different concepts.⁵⁰ In reference to music,

is the most extensive account of *melopoia* that has survived from antiquity) comes from a genuine Aristoxenian source.

⁴⁶ Cleonid. *Harm.* p. 206.19ff. Jan (an epitome of Aristoxenian harmonic theory).

⁴⁷ Aristox. *Harm.* 38.20–4, p. 48.5–8 Da Rios.

⁴⁸ ps.-Plut. *De mus.* 33 1143a.

⁴⁹ Cf. Aristox. *Harm.* 18.24ff., p. 23.2ff. Da Rios: “it must be granted that the most important factor, and the one carrying the greatest weight in the pursuit of the correct constitution of melody (σύστασιν τοῦ μέλους), is that which deals with the process of combination (περὶ τὴν σύνθεσιν) and its special peculiarities.”

⁵⁰ Arist. *GC* 328a: “Composition (σύνθεσις) is not identical with combination (μίξις), but other than it. From these premises it clearly follows that so long as the constituents are preserved in small particles, we must not speak of them as combined. For this will be a composition instead of a blending or combination: nor will every portion of the resultant exhibit the same ratio between its constituents as the whole. But we maintain that, if combination has taken place, the compound must be uniform in texture throughout any part of such a compound being the same as the whole”

mixture is to be understood as the blending of two simultaneous but theoretically distinct elements in order to create a particular piece of music, because “*mixis* is a certain combination of incomposite elements in practice (μίξις τις ἔστι τῶν κατὰ τὴν χρῆσιν ἄσυνθέτων μερῶν)” (*De mus.* 35 1144b-c).⁵¹

These incomposite elements, numbering three at least — the note (φθόγγον), the duration (χρόνον), and the syllable or letter (συλλαβὴν ἢ γράμμα), as listed in ch. 35 — always fall on the hearing and must be perceived simultaneously: “since all these progressions go on together (ὁμοῦ δὲ προβαίνοντων), we have to direct the attention of our perceptions to all of them at once” (*De mus.* 35 1144a-b).⁵² As exemplified in ch. 33 with regard to a traditional piece of music (the so-called *nomos* of Athena), such a mixture may be obtained when a particular arrangement of intervals, the enharmonic genus, is set at a certain pitch, the Phrygian key, and “mixed” (μιχθέν) with a specific rhythm, the *paion epibatos*.⁵³ The product of this blend is a musical composition whose “character” will change if only one of its elements, for instance the rhythm — trochaic rather than paeonic — is modified.⁵⁴ In such a *mixis*, our perception will not be able

In the *Elementa harmonica*, Aristoxenus clearly distinguishes a “mixture” of elements, occurring simultaneously, from a “combination” of elements into a sequence, which he calls *synthesis*.

⁵¹ Cf. Arist. Quint. *De mus.* 1.12, p. 29.5ff. W.-I. (in the passage on melodic composition quoted above): “mixture (μίξις) is that through which we fit together with one another either notes, or ranges of sounds, or melodic genera, or the *systemata* of the *tropoi*.”

⁵² Cf. the Platonic definition of *melos*: τὸ μέλος ἐκ τριῶν ἔστιν συγκαίμενον, λόγου τε καὶ ἁρμονίας καὶ ῥυθμοῦ (*Rep.* 398d).

⁵³ The ancient Greeks distinguished three main types or “genera” (*genē*) of scale: in the enharmonic, the two inner notes of a tetrachord (a system of four notes spanning a fourth) were at intervals of a quarter-tone, leaving a gap of two tones above them. The “key” (*tonos*) in which a piece is transposed determines its higher or lower pitch. As far as the rhythms are concerned, according to Aristides Quintilianus (*De mus.* 1.16, p. 37.7–9 W.-I.), the *paion epibatos* was a rhythm in the ratio 3:2, the scheme of which is: long thesis, long arsis, thesis of two longs, long arsis.

⁵⁴ *De mus.* 33 1143b-c: “with...subtle modulations of the rhythm, but of nothing else, ... it is possible nevertheless for there to occur a considerable alteration in moral character (μεγάλην ἀλλοίωσιν ἔσχηκε τὸ ἦθος).” To take a modern example, in the famous *Air on the G String* (arranged for string and piano in the late XIXth century by August Wilhelmj from the second movement of Johann Sebastian Bach’s *Orchestral Suite no. 3 in D Major*, composed between 1717 and 1723), by modulating the key

anymore to separate (χωρίζειν) each of its constitutive elements, for “the good and the bad” (τὸ γὰρ εὖ καὶ τὸ ἐναντίως) do not lie in specific isolated (ἀφωρισμένοις) notes, durations or letters, but in continuous sequences of them (ἀλλ’ ἐν συνεχέσιν).⁵⁵ Hence, to be a competent judge of music, the first task is to gain an understanding of this “continuity” (συνέχεια) among the items, which is necessary for the exercise of our critical faculty (ἀναγκαῖον ... τῇ κριτικῇ δυνάμει — *De mus.* 35 1144a-c).

The discourse on the κριτικὴ δύναμις, that is, on the business of forming a judgment about a piece of music in all its dimensions, is more fully developed in ch. 36. After having reaffirmed the insufficiency of technical competence to become a *teleos mousikos* and *kritikos*,⁵⁶ the author clarifies that the two main objects (ends in themselves, i.e., τέλεια) of our critical judgment are both the musical composition (ποίημα) and its performance (ἐρμηνεία):

The first point is that some of the things that are objects of our judgment are ends in themselves (τὰ μὲν ... τέλεια), while others are not (τὰ δ’ ἀτελή). An individual composition (αὐτὸ τε τῶν ποιημάτων ἕκαστον) is such an end — a piece which is sung, for instance, or one played on the *aulos* or one played on the *kithara* — and so is the performance (ἡ ἐκάστου αὐτῶν ἐρμηνεία) of any of these — the playing on the *aulos*, the singing, and all other such things Over and above these matters and all others like them, judgment will be passed on the character of the performance (τὸ τῆς ἐρμηνείας ἥθος), to decide whether the performer’s interpretation

of the piece from its original D Major to C Major — due to the need to play the piece on only one string of the violin, the G string — and by transposing the melody down an octave, the “character” of the musical air changes considerably from that of the original one, assuming more “romantic” tones.

⁵⁵ In this sense we should probably interpret another Aristoxenian fragment (Clem. Al. *Strom.* 6.11.88.1 = fr. 84 Wehrli), in which the author underlines the peculiar affinity between the Dorian *harmonia* and the enharmonic genus, so as to suggest the more appropriate mixture of elements in order to produce a certain *ēthos*: προσήκει δὲ εὖ μάλα τὸ ἐναρμόνιον γένος τῇ Δωριστὶ ἀρμονίᾳ, καὶ τῇ Φρυγιστὶ τὸ διάτονον, ὥς φησιν Ἀριστόξενος.

⁵⁶ *De mus.* 36 1144c: “The next thing to notice is that those who have expert knowledge of music are not as such fully equipped for the business of critical judgment. For it is impossible to become a complete *mousikos* and *kritikos* just on the basis of those things which are treated as parts of musical expertise as a whole, for instance”

is appropriate (οἰκεῖον) to the composition that was entrusted to him, and which he was seeking to execute and interpret. The same applies to the emotions expressed in compositions through the art that is proper to composers (ἐπὶ τῶν παθῶν τῶν ὑπὸ τῆς ποιητικῆς σημαυνομένων ἐν τοῖς ποιήμασιν, *De mus.* 36 1144d-e).

So the final goal (τέλος) of the critical faculty (arising from a combination of reason [διάνοια] and perception [αἴσθησις])⁵⁷ is the identification and evaluation of the “appropriate” and the “inappropriate” in music, because “we invariably speak of the appropriate (τὸ γὰρ οἰκεῖως) with an eye to *ethos* (πρὸς ἡθὸς τι βλέποντες),”⁵⁸ when evaluating the concrete realization of a musical composition and its adherence to the composer’s intention.

The reference to both the “composition” and the “performance” as the two final objects of critical judgment in music (which will be echoed, as we will see, also in later sources) seems to confirm that, besides the moral qualities expressed by music, a *teleos mousikos* and *kritikos* is called to evaluate also its “aesthetic” properties: the “goodness” of a composition needs to be maintained in its performance (by means of a singer or instrumentalist)⁵⁹ exactly as it was conceived and “signified” (σημαινομένων) by its author, otherwise it lacks its effectiveness. The identification of aesthetic with ethical “goodness”⁶⁰ is something inherent in the Greek conception of “art” (the meaning of which was determined by *mimesis*) and, although in this passage Aristoxenus does not explicitly refer to any particular ethical value (in contrast to Plato, who did) and never advocates

⁵⁷ See ps.-Plut. *De mus.* 34 1143f–1144a: “Speaking generally, then, perception (αἴσθησιν) and reason (διάνοιαν) must run along together (ὁμοδρομεῖν) in their judgment of the elements of music (ἐν τῇ κρίσει τῶν τῆς μουσικῆς μερῶν).” On the criteria of Aristoxenus’ inquiry in matters of music, cf. Aristox. *Harm.* 38.27ff., p. 48.11ff. Da Rios. On the combination of these two elements for the development of the critical judgment, see already Plat. *Laws* 670a–b, quoted at n. 13 (τῶν γὰρ ῥυθμῶν καὶ τῶν ἁρμονιῶν ἀναγκαῖον αὐτοῖς — sc. the chorus of elders — ἐστὶν εὐαισθητῶς ἔχειν καὶ γινώσκειν) and Arist. *de An.* 432a16 (... τῷ τε κριτικῷ, ὃ διανοίας ἔργον ἐστὶ καὶ αἰσθήσεως).

⁵⁸ ps.-Plut. *De mus.* 33 1143a.

⁵⁹ Cf. ps.-Plut. *De mus.* 36 1144d quoted above: ... ἡ ἐκάστου αὐτῶν ἐρμηνεία, οἷον ἢ τ’ αὐλησις καὶ ἡ ψῶδι καὶ τὰ λοιπὰ τῶν τοιοῦτων.

⁶⁰ Arist. *Rhet.* 1366a33–4: “*kalon* is that ... which is both good and also pleasant because good” (καλὸν μὲν οὖν ἐστὶν ... ὃ ἂν ἀγαθὸν ὦν ἡδὺ ᾖ, ὅτι ἀγαθόν).

(neither here, nor anywhere else in his surviving works) a conception of music as “imitation” of something else, we may argue — basing our assumptions on the evidence quoted so far — that, according to him, the most valuable and admirable music was the “old,” traditional, ethically loaded music.

As a recent and detailed study clearly shows,⁶¹ the story preserved in ch. 31 at the opening of this long Aristoxenian section concerning the musician Telesias of Thebes demonstrates that the sense of what is “good” needs to be instilled in human beings through early training and experience:

When Telesias of Thebes was young he was brought up on the best sort of music (ἐν τῇ καλλίστῃ μουσικῇ):⁶² among the highly reputable composers whose music he learned were Pindar, Dionysius of Thebes, Lamprus and Pratinas and the other lyric composers who produced good instrumental pieces. He also performed excellently on the *aulos*, and made a thorough study of all the other elements of a complete education. But when he had passed the prime of his life he was so completely seduced by the complicated sort of theatrical music (ὑπὸ τῆς σκηνικῆς τε καὶ ποικίλης μουσικῆς) that he came to despise the fine compositions on which he had been brought up, and learned very carefully those of Philoxenus and Timotheus, particularly the most complicated of their pieces, and the ones with the maximum amount of innovation. When he had then set out to compose melodies, and tried his hand at both styles — that of Pindar and that of Philoxenus — he could achieve no success at all in Philoxenus’ manner. And the reason lay in the excellent training he had from his childhood (τὴν ἐκ παιδὸς καλλίστην ἀγωγὴν). (*De mus.* 31 1142b-c = Aristox. fr. 76 Wehrli)

In light of this passage, it is also easier to explain some other unflattering remarks by Aristoxenus, handed down by secondary sources, concerning “modern” music, which he labeled “womanish” (θηλυνομένη)

⁶¹ Barker (2007) 247ff. The results to which Barker comes in his book are, however, slightly different from mine: according to him, the conception of *ēthos* embedded in these texts does not seem to carry connotations of a recognizably ethical kind. On this see *ibid.* 254–9, with a discussion on a passage presumably coming from the Aristoxenian tradition, that is, Cleonid. *Harm.* p. 206.6–18 Jan.

⁶² In the *Elementa harmonica*, Aristoxenus uses the adjective *kallistos* only once (*Harm.* 23.6, p. 29.16 Da Rios), in reference to the melodic composition typical of the enharmonic scales and belonging to the ancient style.

in comparison to the “more masculine” (τὰ ἀνδρικώτερα) melodies of the ancient times,⁶³ or concerning the “barbarization” of theatrical music contemporary to him (τὰ θέατρα ἐκβεβαρβάρωνται), which had by that time become dependent only on the audience’s taste.⁶⁴ Despite Aristoxenus’ interests in theatrical music (evidence of which lies in the titles of some of his lost works, e.g., *On Tragic Dance* [Περὶ τραγικῆς ὀρχήσεως], *On Tragic Poets* [Περὶ τραγωδοποιῶν], and maybe even *On Dithyrambists* [Περὶ διθυραμβοποιῶν], in which the life of Telestes of Selinunte might have appeared, see Apollon. *Mir.* 40 = fr. 117 Wehrli), his position on such a musical repertoire and on the ethics conveyed by it seems, then, to have been that of a moderate conservative who, just because he was well aware of the aesthetic glamor of musical innovations on the contemporary audience, recommended a musical performance and education based on musical principles inspired by ancient tradition, whose goal was the formation and preservation of character,⁶⁵ as well as of musical taste.⁶⁶

To sum up, from a careful analysis of the Aristoxenian passage quoted by the ps.-Plutarchan *On music*, we can infer that, for Aristoxenus, the *ethos* of a musical composition arises from the way in which melodic and rhythmic elements are associated with each other, as well as from the performance and interpretation of the resulting blend by the musician. A composition (ποίημα) and its performance (ἐρμηνεία) are the two main objects of the critical judgment of a *teleos mousikos* and *kritikos* (that is, someone who has a full understanding of the subject, not simply a composer or a musician), whose goals are the ethical and aesthetic understanding and appreciation of what is “appropriate” (οἰκεῖος) in music.⁶⁷ Since the sense of what is

⁶³ Cf. Them. *Or.* 33.1 364b-c = Aristox. fr. 70 Wehrli, where the musician encourages his pupils to look for a more manly musical style of composition and recommends them to rarely sing in theatres, because, according to him, it is not possible to be pleasant to the audience and, at the same time, to remain faithful to the ancient musical style.

⁶⁴ Ath. 632a = Aristox. fr. 124 Wehrli: ... οὕτω δὲ οὖν, φησί, καὶ ἡμεῖς, ἐπειδὴ καὶ τὰ θέατρα ἐκβεβαρβάρωνται καὶ εἰς μεγάλην διαφθοράν προελήλυθεν ἡ πάνδημος αὕτη μουσική, καθ’ αὐτοὺς γινόμενοι ὀλίγοι ἀναμνησκόμεθα οἷα ἦν ἡ μουσική. On this fragment see Meriani (2003) 15–48. For a parallel in the context of rhetoric, see Arist. *Pol.* 5 1313b40–1: ἔστι γὰρ ὁ δημαγωγὸς τοῦ δήμου κόλαξ.

⁶⁵ Str. 1.2.3 = Aristox. fr. 123 Wehrli, quot. n. 25.

⁶⁶ ps.-Plut. *De mus.* 31 1142b-c = Aristox. fr. 76 Wehrli, quoted above.

kalon may be instilled in human beings through early training, musical education is remarkably useful, but it cannot be limited to practical or technical knowledge.⁶⁸

Anyone who aims at beauty and discrimination in his treatment of music ... should round it off with the other branches of learning and take philosophy as his principal teacher: for it is philosophy that has the capacity to judge the proper measure for music (τὸ μουσικῇ πρόπον μέτρον), and how it should be used (τὸ χρῆσιμον). (ps.-Plut. *De mus* 32 1142c-d)

If the connection between philosophy and music expressed in this Aristoxenian statement goes back to Plato⁶⁹ (later on becoming typical of all scientific enquiry on music),⁷⁰ the concept of τὸ πρόπον (“what is appropriate”) as well as all the references to the pleasure inherent in

⁶⁷ In the *Politics* (1340a), Aristotle states that “since music is one of the things that is pleasant, and virtue is to do with enjoying, loving and hating things correctly, it is clear that we should not learn or get used to anything so much as judging correctly (τὸ κρίνειν ὀρθῶς) and enjoying (τὸ χαίρειν) fine characters and noble deeds (τοῖς ἐπαικέσιν ἡθεσι καὶ ταῖς καλαῖς πράξεσιν).” Cf. also ps.-Arist. *Pr.* 19.38: “we enjoy different styles of music because of their character” (διὰ δὲ τὸ ἔθος τρόπους μελῶν χαίρομεν).

⁶⁸ Practical abilities (like familiarity with instruments, or training in the exercise of perception) as well as theoretical knowledge (such as rhythmic and harmonic sciences, the theory of instrumental accompaniment or the theory of diction) are both listed as insufficient to produce a good critic at ch. 36 of the ps.-Plutarchan *De mus.* (1144c-d).

⁶⁹ As Barker (2007) 238–9 opportunely remarks. On this, cf. also Plat. *Phlb.* 17c-e: “But suppose, my good friend, that you grasp the number and the qualities of the intervals related to high and low pitch of sound, and the boundaries of the intervals, and the number of *systemata* that have arisen out of them. These *systemata* were identified by people in the past, and they handed down to us, their successors, the practice of calling them *harmoniai*, and in the movements of the body they identify other, similar inherent features which, they say, we must measure by numbers, and call rhythms and measures, while being aware that this is how we should investigate every one and many. For when you grasp them in this way, then it is that you have become an expert ... (τότε ἐγένου σοφός).”

⁷⁰ Cf. Arist. Quint. *De mus.* 3.27, p. 133.21–4 W.-I.: ταύτης οὖν, λέγω δὲ φιλοσοφίας, ὥς μεγίστην σύννομον καὶ ὁπαδὸν τὴν μουσικὴν ἀσκητέον τε καὶ παιδευτέον τελεώτατα We know from Porphyry (*in Ptol.* p. 4.19–21 Düring) that Ptolemy too founded his musical judgment on philosophy following the examples of Pythagoreans and Aristoxenians: ... ἀλλὰ καὶ τὸ ἐκ φιλοσοφίας μάλιστα τῆς τῶν παλαιῶν ὠρμηθῆναι, ἀφ’ ἧς καὶ οἱ Πυθαγόρειοι καὶ οἱ Ἀριστοξένειοι τὸ ἐπιστημονικὸν ἐν ταῖς θεωρίαις συνήψαν.

music, most probably come from the Peripatetic environment, which was of basic importance for Aristoxenus' intellectual development. Therefore the Tarentine philosopher, even though paying great attention to the aesthetic value of music (that is to say, to the intrinsic significance of the music itself), may be set within the great philosophical tradition that conceived of music as an effective means of developing the capacity for comprehension and judgment of ethical values.⁷¹

Besides more practical purposes,⁷² the final goal of the philosopher who devotes himself to music is the development of the critical faculty, because music is beneficial to the practice of *understanding* (ξύνεσις), "the ruling principle and judge of everything" (τὸ γὰρ ἐπιστατοῦν πᾶσι καὶ κρῖνον τοῦτ' ἔστι, Aristox. *Harm.* 41.10ff., p. 51.13ff. Da Rios). As Aristoxenus states furthermore in the same passage of the *Elementa harmonica* (where he is discussing the fact that practical abilities, like the capacity for writing musical notes, are not the aims of harmonic science), "we shall have missed the truth if we make *that which judges* (τὸ μὲν κρῖνον) neither the limit nor the ruling principle (μήτε πέρας μήτε κύριον), and make into the limit and ruling principle that which is judged" (τὸ δὲ κρινόμενον κύριόν τε καὶ πέρας, *Harm.* 41.20–5, p. 52.1–4 Da Rios).

4. Echoes of Aristoxenian Theories in Later Sources

The subject of the theory of musical *ethos* remained popular for many centuries, though its most representative authority came to be the nebulous figure of Damon, identified by many scholars as the main source of Plato's theorizing on the moral effects of music.⁷³

⁷¹ Plat. *Rep.* 402b-c: "Then, by heaven, am I not right in saying that by the same token we shall never be true musicians (μουσικοί) ... until we are able to recognize the forms of soberness (τὰ τῆς σωφροσύνης εἶδη), courage (ἀνδρείας), liberality (ἐλευθεριώτης), and high-mindedness (μεγαλοπρεπείας) and all their kindred and their opposites, too, in all the combinations that contain and convey them, and to apprehend them and their images wherever found, disregarding them neither in trifles nor in great things, but believing the knowledge of them to belong to the same art and discipline?" (transl. in Shorey [1930]).

⁷² Already identified by Aristotle, who stated that "they who are to be judges must also be performers" (ἐπεὶ τοῦ κρῖναι χάριν μετέχειν δεῖ τῶν ἔργων, *Pol.* 1340b35–6).

⁷³ On the reassessment of this interpretation, see n. 9.

One of the most extensive sources of evidence on this topic from antiquity is a late musical treatise, Aristides Quintilianus' *On music* (4th CE), a work which aspires to put everything relevant to the study of music in a single treatise, while relying on many different earlier sources (Platonic, Peripatetic, Neoplatonic) that are often difficult to identify because the author has elaborated on them so extensively. As a matter of fact, this writer (whose name alone is known) does not assemble various sources by chance, but tries to include them within an overall conception of a divine order of things; therefore, it is not always easy to determine how far he has gone with the arrangement of the materials at his disposal.

In book 1, Aristides classifies the parts of music and of musical understanding into a theoretical (τὸ θεωρητικόν) and a practical (τὸ πρακτικόν) side:⁷⁴ theoretical studies include two main fields, the “technical” (which investigates the items to be found in audible music — such as notes, rhythmical patterns and syllables — and their organization in wider structures) and the “physical” (which goes in search of the “highest principles and natural causes” [τὰς ἄνωθεν ἀρχὰς καὶ φυσικῶς αἰτίας]), while the practical or “educational” side of musical study investigates the ways in which technical knowledge of music can be used in practice, specifically for the soul's good.

The value of music in education and in psychiatric therapy, the two main empirical applications of musical structures, is the subject of book 2 of the treatise, which gives also different accounts of the nature of the soul.⁷⁵ Echoes of the Aristoxenian theories may be found, first of all, in Aristides' subdivision of this “practical” part of music in two branches: the first (called τὸ χρηστικόν) studies and judges how the musical elements are used in composition to convey a particular *ēthos*, and is in its turn divided into melodic composition (μελοποιία), rhythmic composition (ῥυθμοποιία) and poetry (ποίησις); the second (called τὸ ἐξαγγελτικόν) deals instead with the nature and value of different modes and means of musical performance or “expression,” that is, it concerns the performance of the components just mentioned, and its parts are “instrumental performance (ὄργανικόν), vocal performance (ὥδικόν) and acting (ὑποκριτικόν), including the bodily

⁷⁴ Arist. Quint. *De mus.* 1.5, p. 6.9ff. W.-I.

⁷⁵ See Arist. Quint. *De mus.* chs. 2, 8 and 17, with further elaboration in book 3.

movements corresponding to the melodies that underlie them.”⁷⁶ Aristides’ interest in the performance or “delivery” of a work (whether dramatic, rhetorical or musical) in addition to its composition shows many affinities with the Aristoxenian identification of two main objects of critical judgment, the musical composition on the one side (ποίημα) and its interpretation in performance on the other (ἐρμηνεία).

Furthermore, in ch. 16 of book 2, Aristides Quintilianus points out the involvement of many instruments more appropriate to them — in determining the specific “character” of a piece and its performance. This result is very similar to Aristoxenus’ conception of *ēthos* (which, as we have seen, he believes to arise from the ways in which different kinds of items are associated with each other in *melopoiia*):

The total activity of music then involves an appropriate idea,⁷⁷ suitable diction, and equally suitable *systema*, and the corresponding *harmonia* [i.e., selection] of notes, quality of rhythm and use of instruments...⁷⁸

In musical therapy — Aristides continues, making a parallel with the wise doctors and their φάρμακα — we can apply all the elements of this μουσουργία (that is, “making music”), sometimes complete (τέλεια μὲν), sometimes as a “mixture” (ἐνίοτε δὲ μκτέον), incorporating elements of a different quality though not opposites, for such a blending would be unsuitable (ἀπρεπές). The mixture (τὴν δὲ μίξιν), instead, should be made up of intermediates blended harmoniously together with extremes (τῶν μέσων πρὸς τὰ ἄκρα συναρμοττομένων), as, for instance, when we link an intermediate

⁷⁶ Arist. Quint. *De mus.* 1.5, p. 6.20–4 W.-I.: καὶ τοῦ μὲν χρηστικοῦ μέρη μελοποιία ῥυθμοποιία ποίησις, τοῦ δὲ ἐξαγγελτικοῦ ὀργανικὸν ψῆδικόν ὑποκριτικόν, ἐν ᾧ λοιπὸν καὶ σωματικαὶ κινήσεις ὁμολογοὶ τοῖς ὑποκειμένοις μέλεσι παραλαμβάνονται.

⁷⁷ Also an “evaluative attitude”. For an account of the origins of evaluative attitudes, and an explanation of why they differ from one person to another, see Arist. Quint. *De mus.* 2.8, p. 67.15ff. W.-I.

⁷⁸ Arist. Quint. *De mus.* 2.16, p. 85.21ff. W.-I.: Ἐν τελείᾳ δὴ μουσικῆς ἐνεργείᾳ καὶ ἔννοια λαμβάνεται πρόσφορος καὶ λέξις πρέπουσα καὶ σύστημα παραπλήσιον καὶ ἁρμονία φθόγγων καὶ ῥυθμοῦ ποιότητες καὶ ὀργάνου χρήσις ὁμολογουμένη.

rhythm with a “male” arrangement of intervals, or an intermediate kind of scale with a more “female” rhythm, and so on.⁷⁹

So, if according to Aristoxenus the process through which the artist builds his composition using a certain “mixture” of incomposite elements (that is, a certain *melopoia*) is essential to producing the *ēthos* more suitable to it (ps.-Plut. *De mus.* 33 1143a), in Aristides (or in his Peripatetic source) this same “mixture” of elements — or a better-balanced one — may be useful in musical therapy too, to drive the patient’s character into the requested condition. It seems possible, then, to infer that in this part of the treatise Aristides elaborated his account of musical therapy relying just on the peculiar Aristoxenian view of musical *ēthos*.

Nevertheless, apart from such thematic and terminological parallels (such as the reference to μῆξις), it seems reasonable to infer that Aristides Quintilianus may have had at his disposal a much wider Aristoxenian source, which — besides the description of the critical judgment’s purposes in matters of music — also treated the psychagogic power of musical compositions and performances on the human soul. Unfortunately the evidence concerning Aristoxenus’ conception of the soul and his personal elaboration of a doctrine of musical therapy is somewhat limited, if not exiguous. Concerning this second point, we have only the anecdotal information handed down by a few fragments;⁸⁰ in one of them the philosopher states that “music, through its own order and proportion, calms bodies and minds and leads them into the contrary condition (εἰς τὴν ἐναντίαν κατάστασιν),”⁸¹ showing an approach to music therapy closer to the Pythagorean “allophatic” one (according to which psychic and physical *pathē* are cured by the

⁷⁹ Arist. Quint. *De mus.* 2.16, p. 85.24ff. W.-I. The distinction between “male” and “female” elements is, by Aristides, applied to all the qualities of perceptible things, being the foundation of his philosophical view.

⁸⁰ See Apollon. *Mirab.* 49 and 40 = fr. 6 and 117 Wehrli, where the philosopher is described as a sort of “music therapist.”

⁸¹ ps.-Plut. *De mus.* 43 1146f–1147a = Aristox. fr. 122 Wehrli: ὁ ὑμέτερος Ἀριστόξενος ... ἔλεγεν εἰσάγεσθαι μουσικὴν, παρ’ ὅσον ὁ μὲν οἶνος σφάλλιν πέφυκε τῶν ἁδὴν αὐτῷ χρησαμένων τὰ τε σώματα καὶ τὰς διανοίας, ἡ δὲ μουσικὴ τῇ περὶ αὐτὴν τάξει τε καὶ συμμετρῳ εἰς τὴν ἐναντίαν κατάστασιν ἄγει τε καὶ προαΐνει.

use of musical remedies on the basis of their opposition to them)⁸² than to Aristotle's homeopathic view of musical *katharsis*.⁸³ As a consequence, this scarcity of evidence renders it impossible for us to give a wider and more detailed account of such an important part of Aristoxenus' philosophical thought.

⁸² Cf. Iambl. VP 114: ἔτι τοίνυν σύμπαν τὸ Πυθαγορικὸν διδασκαλεῖον τὴν λεγομένην ἐξάρτυσιν καὶ συναρμογὰν καὶ ἐπαφὰν ἐποιεῖτο, μέλεσσι τισιν ἐπιτηδεύουσιν εἰς τὰ ἐναντία πάθη περιάγον χρησίμως τὰς τῆς ψυχῆς διαθέσεις. ἐπὶ τε γὰρ εὐνὰς τρεπόμενοι τῶν μεθ' ἡμέραν ταραχῶν καὶ περιηχημάτων ἐξεκάθαιρον τὰς διανοίας ψδαῖς τισι καὶ μελῶν ιδιώμασι καὶ ἡσύχους παρεσκεύαζον ἑαυτοῖς ἐκ τούτου καὶ ὀλιγονείρους τε καὶ εὐονείρους τοὺς ὕπνους, ἐξανιστάμενοί τε ἐκ τῆς κοίτης νωχελίας πάλιν καὶ κάρους δι' ἄλλοτρόπων ἀπήλλασσον ὁσμάτων, ἔστι δὲ καὶ ὅτε ἄνευ λέξεως μελισμάτων On the possibility that this late evidence relies on Aristoxenus himself, see Provenza's paper in this volume.

⁸³ Cf. Arist. Quint. *De mus.* 2.14, p. 80.10ff. W.-I.: "if you use *harmoniai* in the ways we have explained, applying them to each soul on the basis either of their similarity (καθ' ὁμοιότητα) or of their opposition to it (κατ' ἐναντιότητα), you will disclose the bad character that lurks within it, and cure it, and replace it with a better. If the underlying disposition is coarse and stubborn, it is through what is intermediate that you will generate persuasion and bring it into the opposite state (ἐς τοῦναντίον); while if it is fine and good you will use what is similar to it (δὲ ὁμοιότητος), and thereby augment it to the right proportion."

Aristoxenus and Music Therapy

Fr. 26 Wehrli within the Tradition on Music and Catharsis

Antonietta Provenza

1. Introduction

The importance of music for the ancient Pythagoreans,¹ together with recognition of its therapeutic function, already attested at the

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¹ Still indispensable for a general overview of early Pythagoreanism and the questions concerning it is Burkert (1972). Among Burkert's main emphases are the Platonic contamination of sources on Pythagoreanism since the 4th century BCE and the representation of Pythagoras as a "wise man" with shamanistic features (although the unsuitability of the notion of shamanism for ancient Greek culture has been since highlighted in Bremmer [1983] 29–48 and [2002] 27–40; cf. also Minar [1971]), rather than as a "scientist," since "scientific Pythagoreanism" is not clearly attested until Philolaus. Most important among the studies opposing Burkert's "shamanistic" Pythagoras and giving prominence to the "scientific" side of early Pythagoreanism and to its relationship with Near-eastern science are Kahn (1974), van der Waerden (1979) and Zhmud (1997). Also see on Pythagoreanism and its sources: Centrone

dawn of Greek literature,² favored the rise of a long tradition relating to the Pythagoreans and music therapy, which is most famously and richly attested in two Neoplatonic works, *The Life of Pythagoras* (*Vita Pythagorae*) by Porphyry of Tyre (ca. 234–305 CE)³ and *On the Pythagorean Life* (*De vita Pythagorica*) by Iamblichus of Chalcis (ca. 245–325 CE).⁴

Although the most ancient sources on Pythagoras tell us nothing on the subject,⁵ the tradition relating to the Pythagorean use of music therapy, at all events, dates back to long before the two Neoplatonists, as is shown by a brief and well-known fragment by Aristoxenus referring not only to medical healing of the body but also to musical

(1999²); Kahn (2001), useful for what concerns Pythagoreanism in the Renaissance and its influence on astronomy; Riedweg (2005); Huffman (1999); Huffman (2005a) and Huffman (2006). Among studies before Burkert's *Lore and Science*, I limit my references here just to Philip (1966), who treats Aristotle as the most important and reliable source for early Pythagoreanism.

² The oldest literary evidence for music therapy in ancient Greece is in book 1 of the *Iliad* (472–4, concerning paeans) and in book 19 of the *Odyssey* (456–8, concerning ἐπωδή, the “sung spell”).

³ It is just a portion (incomplete, as it seems) of the first book of a very large work (attested with the title Φιλόσοφος Ἱστορία and lost, except for some short passages) on the history of philosophy as far as Plato (for both Porphyry's *Vita Pythagorae* and the fragments of the Φιλόσοφος Ἱστορία see Des Places [2003²]). On the sources and structure of Porphyry's *Vita Pythagorae* see esp. Staab (2002) 109–34. Porphyry's *Vita Pythagorae* is quoted in this essay according to Des Places' edition (2003²).

⁴ The title of Iamblichus' work on Pythagoras (ca. 300 AD) as handed down in manuscripts is Περί τοῦ Πυθαγορείου (-ικοῦ) βίου. It is the largest work on Pythagoras and his sect that we have from late antiquity. It was originally part of a work in ten books, of which five have come down to us, devoted by the Neoplatonist philosopher to Pythagorean doctrines (see O'Meara [1989] esp. 30–105 and the introduction to Dillon-Hershbell [1991]). Regarding the sources of Iamblichus' *De vita Pythagorica*, see Staab (2002). Iamblichus' *De vita Pythagorica* is quoted in this essay according to Deubner and Klein's edition (1975).

⁵ The oldest evidence concerning Pythagoras is Xenophanes 21B7 DK = D.L. 8.36 (on metempsychosis, see Huffman [2009] 34–8); Heraclitus 22B40 DK = D.L. 9.1, B81, B129; Empedocles 31B129 DK (quoted through Nicomachus also in Porph. *VP* 30 and Iamb. *VP* 67); Herodotus 2.81, 4.95; Ion of Chios 36B2 DK = D.L. 8.8, B4 = D.L. 1.120 and Democritus 68A1 DK = D.L. 9.38 and 68A33 = D.L. 9.46. Evidence on Pythagoreanism can be roughly divided into three groups: reports of the same age as the Presocratics, handed down orally for the most part; the written sources of the Academy and the Peripatos; the “legend,” taking shape mainly in the Pythagorean works of the Neoplatonists Porphyry and Iamblichus, in Diogenes Laertius' *Vitae Philosophorum* and in Photius' *Bibliotheca*.

healing of the soul, defined as “catharsis.” In the fragment, which must have been part of Aristoxenus’ work *On the Pythagorean Life* (Περὶ τοῦ Πυθαγορικοῦ βίου) and was first published by Cramer in his collection of Greek anecdotes contained in the manuscripts of the Bibliothèque Royale in Paris,⁶ we read that “the Pythagoreans, as Aristoxenus said, used medicine for the purification of the body, and music for that of the soul” (οἱ Πυθαγορικοί, ὡς ἔφη Ἀριστόξενος, καθάρσει ἐχρῶντο τοῦ μὲν σώματος διὰ τῆς ἰατρικῆς, τῆς δὲ ψυχῆς διὰ τῆς μουσικῆς).⁷

The two fundamental aspects of this fragment, as identified by Wehrli in his brief comment,⁸ are on one side the tradition, i.e., that set of customs rooted in religious rites and in practical life, sanctioned by atavistic norms, on the basis of which it was necessary to keep contamination (μίασμα) as far as possible from the contexts of daily life, and, on the other, the distinction, in a human being, of both a physical and also a psychic sphere living in a profound and necessary relationship with one another.⁹ However, its importance consists not only in the explicit reference to a musical catharsis used by the early Pythagoreans and concerned with the healing of the soul but above all in the fact that, chronologically, it represents the first testimony in which music therapy — and in particular therapy specifically defined as “catharsis” — is associated with the Pythagoreans.¹⁰ Because of the authority of Aristoxenus and the success of the concept of musical catharsis, which emerges for instance in Iamblichus’ *On the Pythagorean Life*, the testimony of fr. 26 Wehrli seems, more than any other, to have determined the almost undisputed acceptance of the existence of a true theory of musical catharsis, including an ethical dimension,¹¹ worked out by the early Pythagoreans, which served as a model for

⁶ J. A. Cramer, *Anecdota Graeca e codd. man. Bibl. Reg. Paris.*, Oxford 1839–41.

⁷ Aristox. fr. 26 Wehrli = Cramer, *Anecd. Paris.* 1.172.

⁸ Wehrli (1967²) 54–5. See also Wehrli (1951) 60–1 (in his opinion, the Pythagoreans influenced Aristotle’s notion of catharsis).

⁹ Useful remarks on body and soul from Homer to Galen are made in Vegetti (1985).

¹⁰ For the identification of a peculiar “Pythagorean catharsis” see Olympiodorus, *In Alc.* 54.145–6 Westerink, where three kinds of catharsis are considered (τρεῖς εἰσὶ τρόποι καθάρσεως): the Pythagorean (Πυθαγορικός), the Socratic (Σωκρατικός) and the Peripatetic-Stoic (Στωϊκός).

¹¹ This opinion seems to originate in late sources, especially in Iamblichus (see, for instance, *VP* 64 and 115).

Aristotle.¹² The fragment has also been interpreted as ascribing to the early Pythagoreans the Platonic theory of musical *ēthos*, with which the fourth-century Pythagoreans must have been very familiar.¹³

The upshot of my discussion will be that both these interpretations are mistaken;¹⁴ our very short text refers instead to the religious notion

¹² Among the many scholars who have asserted the existence of an early Pythagorean theory of musical catharsis with close connections to the *ēthos* theory, of particular note are Abert (1899) 5–7; Howald (1919) 203 and 206–7; Busse (1928) 37 and 49–50, who distinguished a Pythagorean catharsis, considered as ethical and allopathic, from an Aristotelian catharsis, considered as aesthetic and homeopathic and asserted that the former used music “völlig in der dienst der Ethik” (50); Vetter (1933) 839; Stefanini (1949); Moulinier (1952) 118–20; Koller (1954) 68–9, 98–119 and 132; Else (1958) 73, who explicitly mentions a “Pythagorean-Damonian doctrine” containing the “therapeutic (cathartic) and educational uses of music”; Lord (1982) 123; Rossi (2000) 65–6; Figari (2000), who mentions a Presocratic theory of catharsis, and Gibson (2005) 112–3, who asserts that the doctrine of *ēthos* had Pythagorean origin and passed on to Plato through Damon. Among studies that have been influential regarding the Aristotelian notion of catharsis and its relationship with Pythagoreanism, see especially Rostagni (1922), Croissant (1932) and Boyancé (1937). Rostagni (see esp. 55–65) seems to be the first to highlight the fundamental role of religion and its practices in the background of both Pythagorean and Aristotelian catharsis, in order to explain the influence of Pythagoreanism on Aristotelian catharsis as a consequence of this common cultural substratum (this opinion seems to emerge also in Hoessly [2001] 181–8). On the other hand, Croissant (see esp. 104–5), followed by Schade-waldt (1955) and Flashar (1956), asserted that Aristotle took the word “catharsis” from religion and gave it strong medical connotations but that the theory of catharsis is a late elaboration (cf. on this also Wehrli [1951] and Laín Entralgo [1970] 201–2, the latter emphasizing that medical catharsis and religious catharsis were initially not separate). According to Boyancé (1937) 103–4 and 115–7, the Pythagoreans reinterpreted the “traditional” magic-medical catharsis by giving it mystical and ethical connotations (also see Wehrli [1951] 59), while Aristotle, although taking the notion of catharsis from them, transformed it according to a scientific point of view (187–8; his view differs from both Busse [1928] and Croissant [1932], since they distinguish a Pythagorean catharsis from an Aristotelian one).

¹³ This is, for instance, the point of view expressed already in Wehrli (1951) 56; Wehrli (1967²) 55; Burkert (1962) Vorwort, 7 (omitted in the English edition) and in more recent times in Wallace (1995), which usefully points out, on the other hand, that the early Pythagoreans did not elaborate either a theory of catharsis preceding Aristotle or a theory of musical *ēthos* which preceded Plato’s.

¹⁴ The attribution of a theory of catharsis to the early Pythagoreans is strongly rejected, for instance, by Dodds (1968) 79–80; Parker (1983) 279–80, who refers to Pohlenz (1954²) 2.195–6 (He argues that the existence of such a theory would have been emphasized in Plato’s dialogue, where no trace of it can be found; see *contra* Hoessly [2001] 188) and Halliwell (2009) 182. Burkert (1972) 211–2 points out that

of catharsis, which is well attested in the tradition and had been deeply rooted in Greek culture since its origins. As a matter of fact, the very simple formula asserting that medicine heals the body and music heals the soul¹⁵ reflects common beliefs based on experience, which must have been very widespread and can be connected to other Presocratic texts and to Aristoxenus' *Pythagorean Precepts*. The musical catharsis of the early Pythagoreans, then, was neither the consequence of a fully developed theory of catharsis, nor was it a fourth-century "invention," influenced by both Plato and Aristotle; it was rather a manifestation of a very ancient practice, well attested in Greek culture, which resulted from the strong relationship between religion and medicine. Therefore, Aristoxenus may have meant to propose the early Pythagoreans as renowned representatives of this widespread practice in order to show them as influential forerunners of both Platonic musical *ethos* and Aristotelian catharsis, rather than having interpreted their thought and way of life by means of those schemes.

2. Aristoxenus, Porphyry and Iamblichus

The biographical links between Aristoxenus and Pythagoreanism are very important:¹⁶ in the first half of the fourth century, Tarentum, the native city of the musicologist, was the most significant Pythagorean center,¹⁷ governed for seven years running by the Pythagorean Archytas as the *strategos*.¹⁸ Some fragments of a biography of Archytas

the Pythagorean applications of catharsis do not involve science, and Musti (2000) 44–9, esp. 48, maintains that though the importance of the therapeutic efficacy of music comes to Aristotle from Pythagoreanism, the theory of musical catharsis is Peripatetic. On the question of whether Pythagorean catharsis, in light of Aristotelian catharsis, is to be considered either homoeopathic or allopathic, I refer the reader to the exhaustive treatment of Belfiore (1992) 264–6 and 279–90.

¹⁵ The concept of soul in ancient Pythagoreanism has been recently investigated by Huffman (2009), who has reexamined his previous position on Philolaus' notion of soul (see Huffman [1993] 328–32).

¹⁶ A very useful monograph on Aristoxenus that thoroughly considers the musicologist's personality on the basis of the surviving fragments is Visconti (1999). See also Visconti (2000); Cordiano (2001) and Muccioli (2002) 373–89.

¹⁷ Especially since 379 BCE, when Croton was subjected by Dionysius I. On Pythagoreanism in Southern Italy, see Leszl (1988) and Musti (2005); on the Pythagoreans in Tarentum, see Centrone (1999) 49–52 and Gigante (1971).

¹⁸ Archyt. Test. A1 Huffman = D.L. 8.79. Archytas was born between 435 and 410 BCE and died about 350. For his chronology, see Huffman (2005) 5–6.

written by Aristoxenus are extant.¹⁹ Spintharus, his father²⁰ and probably his first teacher, had close connections to the Pythagoreans of Tarentum, and personally knew the philosopher-governor.²¹ Afterwards, Aristoxenus was a disciple of the Pythagorean Xenophilus in Athens,²² and he himself maintains that he made acquaintance with the last Pythagoreans.²³ We can infer from the surviving fragments of Aristoxenus' Pythagorean works,²⁴ which subsequently became a very important source for Neoplatonic biographies of Pythagoras,²⁵ that the musicologist expressed admiration for the Pythagoreans. The evaluation of the musical aspects of Pythagoreanism by Aristoxenus must have been particularly precious, since he had had Pythagorean training before his Peripatetic training, even if his musicological reflections prove to be very much influenced by Aristotle.²⁶ This influence, however, does not expressly concern only scientific matters but also seems to concern the potentialities of musical listening; in this connection, from the few anecdotes regarding Aristoxenus that have come down

¹⁹ See Archyt. Test. A1, A7 and A9 Huffman and Aristox. fr. 47–50 Wehrli.

²⁰ On the controversy concerning the name of the musicologist's father — either Spintharus or Mnesias, see Visconti (1999) 36–63.

²¹ Spintharus is said to be the source of a story concerning Archytas that is told in Iamb. VP 197–8 = Aristox. fr. 30 (= 49) Wehrli = Archyt. Test. A7 Huffman. See further below.

²² See Aristox. fr. 1 Wehrli = *Suda* s.v. Ἀριστόξενοϛ.

²³ See Aristox. fr. 19 Wehrli = D.L. 8.46.

²⁴ A work entitled either *The Life of Pythagoras* (Πυθαγόρου βίος) or *On Pythagoras and His Followers* (Περὶ Πυθαγόρου καὶ τῶν γνωρίμων αὐτοῦ), a work *On the Pythagorean Way of Life* (Περὶ τοῦ Πυθαγορικοῦ βίου) and the *Pythagorean Precepts* (Πυθαγορικαὶ ἀποφάσεις). The surviving fragments of these works are collected as Aristox. frs. 11–41 Wehrli.

²⁵ Aristoxenus, who was hailed by Leo (1901) 102 as “the founder of literary biography,” is the founder of the biographic tradition for Pythagoras. On biography in Aristotle's school, see Fortenbaugh (2007) 73–6; on Aristoxenus as a biographer, see Momigliano (1993) 74–7, 103 and 120. Aristoxenus' admiration for the Pythagoreans and their politics is also indicated by the relationship he establishes between Pythagoras and the law-givers Charondas and Zaleucus (see Aristox. fr. 17, the source of Iamb. VP 33–4, and fr. 43 Wehrli = D.L. 8.15). Traces of Aristoxenus are also found in Iamb. VP 166, which asserts that the Pythagorean way of life spread throughout Italy giving birth to many philosophers, poets and law-givers and turning that country, which was previously obscure, into Magna Graecia.

²⁶ On the relationship between Aristoxenus' thought and Aristotelian science, see esp. Bélis (1986), Barker (1991) and Gibson (2005) 23–38.

to us — and that we are going to consider later on —,²⁷ there emerges an interest in enthusiastic music and its effects on behavior, which can be set alongside Aristotle's reflection on musical catharsis in book 8 of *Politics*, but also, at the same time, alongside the religious tradition of catharsis found, even earlier than Aristotle, in the widespread ritual practices through which endeavors were made to keep any form of contamination away from the community.

Thus among ancient sources on Pythagoreanism, Aristoxenus is the most important together with Aristotle, who plays the major role as regards their scientific speculations.²⁸ However, it is important to remember that, on the basis of what emerges from the most ancient testimonies, Pythagoreanism fundamentally appears as a lifestyle centering on a community²⁹ and on specific precepts to be followed, the so-called *akousmata*, often referring to purificatory measures.³⁰ Codification of true Pythagorean “scientific” thought seems to emerge starting from the fragments of Philolaus,³¹ although, for Pythagoras

²⁷ See further below, esp. 120–2.

²⁸ Aristotle is considered the most valuable source for the early Pythagoreans by Philip (1966); he maintains that the philosopher was “almost alone in having no Pythagorean axe to grind” (19). Aristotle deals with the Pythagoreans (οἱ καλούμενοι Πυθαγόρειοι) in *Metaph.* 1.5–6 985b23–987a31 (on the Pythagorean theory of number, which, in his opinion, Plato followed) and 14.3 1090a20–1092b25. An interesting feature of Aristotle's account is the general reference to “the Pythagoreans” as far as scientific thought is concerned. This was probably due to the “legend” that had already arisen concerning Pythagoras, which may have made him hesitant to assign specific notions to Pythagoras himself. Aristotle was also the author of a work *Against the Pythagoreans* and of a monograph *On the Pythagoreans* (also attested as *On the Pythagoreans' Opinions*), which are both lost (D.L. 5.25). A comparison between Aristotle's evidence on Pythagoreanism and the fragments of the early Pythagoreans, especially the fragments of Philolaus, shows such important common features between them, as to suggest that Philolaus was Aristotle's most important source for Pythagoreanism. This results in particular from the study of the fragments of Philolaus acknowledged as authentic (1–7 DK); see Huffman (1993) 28–35.

²⁹ See for instance Plato, *Rep.* 600b = Pythagoras 14A10 DK, referring to the Πυθαγόρειος τρόπος τοῦ βίου.

³⁰ On the Pythagorean *akousmata* see, among others, Burkert (1972) 166–92, who defines them as “commonsense wisdom in abstruse form, ancient magical-ritual commandments” (176–7); Parker (1983) 294–7 and Berra (2006).

³¹ Philolaus is the first Pythagorean for whom one can fix almost certain dates (about 470–385 BCE), and probably the first who wrote something. According to Diogenes Laertius (8.84–5), he was the first Pythagorean who wrote a book; see also Iamb. *VP* 199. For his fragments, see Huffman (1993).

himself, one cannot categorically rule out knowledge of mathematical and cosmological doctrines.³² Mathematical and cosmological treatment of music first appears in Philolaus himself and in Hipparis, and, subsequently, in Archytas of Tarentum's study of acoustics and *symphoniai*.³³ However, the lack of any reference to the ethical potentialities of music or to musical catharsis in the fragments of these Pythagoreans does not allow us to maintain that such elements lay outside the interests of the early Pythagoreans and that they only spread among the fourth-century Pythagoreans under the influence of the theory of musical *ēthos*. As a matter of fact, an interest in the benefits of music and in its role in education appears in literary works on the Pythagoreans, which are independent of Plato, as for instance in Aristoxenus' *Pythagorean Precepts*, which, as Huffman (2008) has recently pointed out, are very important evidence of genuine Pythagorean moral philosophy, and also in anecdotes whose origin appears to be independent of Plato and the theory of musical *ēthos*.

³² According to Kahn (1974) 169–70 and (2001) 16–8, followed by Riedweg (2005) 73, among others, Burkert's argument (see Burkert [1972], esp. 155–65, 357) that Pythagoras was a “shaman” seems to overlook the well-known fragments of Heraclitus concerning his *πολυμαθία* (Heracl. 22B40 DK) and *ἰστορίη* (22B129 DK). On the Heraclitean evidence as a conclusive argument on behalf of Pythagoras as a “man of science,” see Zhmud (1997) 30–9. Remarkable similarities between some aspects of Pythagorean mathematics and Babylonian mathematics, and moreover the short distance between Samos, Pythagoras' homeland, and Miletus, the home of Thales, Anaximander and Anaximenes (Pythagoras visited Thales and Anaximander in Miletus, according to Iamb. *VP* 11–3), whose cosmological researches are well attested, give further evidence for the “scientific” side of Pythagoras' personality. Pythagoras seems to have travelled to Egypt (Isocr. [*Bus.* 28] says he learnt philosophy in Egypt and brought it to Greece; cf. Hecataeus of Abdera, *FGrHist* 264F25 and Iamb. *VP* 18–9 and 158–9; similarities between Egyptian and Pythagorean practices emerge also from Hdt. 2.81), and to have been in Babylonia. Aristoxenus (fr. 13 Wehrli = Hippol. *Haer.* 1.2.12 Wendland) says that Pythagoras learnt from the Chaldean Zaratas that everything is founded on the distinction between father and mother, so that male and female are the constituent categories of the world-order. This suits, in turn, musical harmony; cf. Iamb. *VP* 19. He also traveled to Phoenicia (Iamb. *VP* 14). Of course, all this is not enough to prove that Pythagoras himself, rather than his successors, formulated the scientific theories generally considered as Pythagorean, such as the Pythagorean ordering of the heavens, numbers as the constituent elements (*στοιχεῖα*) of everything and the heavenly harmony (Aristot. *Metaph.* 985b31–986a6 and 1090a21–5; cf. Stob. *Ecl.* 1, *Prooem.* 6 = Aristox. fr. 23 Wehrli and Plato, *Rep.* 617b–c).

³³ See Barker (1991a).

Later on, especially in the biographies of Pythagoras written by Porphyry and Iamblichus,³⁴ who usually reinterpret their sources with the aim of reconstructing the thought and way of life of Pythagoras and his followers according to specific paraenetic and propagandistic goals,³⁵ Platonism³⁶ and a real mysticism come to pervade the personality of Pythagoras. He is characterized as a “philosopher” and “master of education” (ἡγεμῶν παιδείας),³⁷ and most notably as a sage with mystical connotations suited to a “pagan holy-man,”³⁸ on whom musical catharsis is supposed to confer a further thaumaturgic power.³⁹

Aristoxenus’ works devoted to the Pythagoreans constituted, then, a privileged source for doxographers in the reconstruction of the role of Pythagoras and the way of life of the Pythagoreans.⁴⁰ His work *On the Pythagorean Life* (Περὶ Πυθαγορικοῦ βίου) is expressly mentioned by Iamblichus (VP 233 = Aristox. fr. 31 Wehrli) as a source for the conception of friendship in Pythagoreanism. Moreover, various passages of the *Pythagorean Precepts* (Πυθαγορικαὶ Ἀποφάσεις)

³⁴ Differences between these two works have been well illustrated by Edwards (1993) 159–72. Porphyry, as opposed to Iamblichus, usually quotes his sources, and the *Vita Pythagorae* has the typical features of biography, while Iamblichus’ *De vita Pythagorica* appears rather as a manifesto of the Neoplatonic βίος φιλοσοφικός.

³⁵ On Porphyry’s and Iamblichus’ sources and the relationship between their works on Pythagoras, see Burkert (1972) 97–109; von Albrecht (2002) and Staab (2002) 12–8, 109–34 and 217–37.

³⁶ For Iamblichus’ presentation of Pythagoreanism as the legitimate forerunner of Platonism, see O’Meara (1989) 9–29.

³⁷ See Plat., *Rep.* 600a–b, where Homer and Pythagoras are considered as “masters of education.” Iamblichus (VP 119–20) portrays Pythagoras as the mythical discoverer of music, and, as a consequence of this, as a model educator (VP 121, οὕτω μὲν οὖν τὴν μουσικὴν εὗρεῖν λέγεται, καὶ συστησάμενος αὐτὴν παρέδωκε τοῖς ὑπηκόοις ἐπὶ πάντα τὰ κάλλιστα, “Pythagoras, according to tradition, discovered music in this way, and after he organized it within a system, he handed it over to disciples so that it could help them to achieve every noble aim”).

³⁸ This felicitous formulation by Fowden (1982) seems to suit well the figure of Pythagoras, which emerges from Iamblichus’ *De vita Pythagorica*. In Burkert’s opinion (Burkert [1982] 13), Pythagoras’ “mythical” features show that Iamblichus wished to propose Pythagoreanism, considered on the same level as theurgy, as an “antidote” to the spread of Christianity (see also Clark [2000] 29–32).

³⁹ As O’Meara (1989) 39 shows, Iamblichus accumulates evidence and signs in his *De vita Pythagorica* in order to demonstrate Pythagoras’ uniqueness.

⁴⁰ Staab (2002) 64–6. It is noteworthy that Porphyry appears more “biographical” and less “doxographical” than Iamblichus.

by the musicologist of Tarentum are recognizable in Iamblichus' *On the Pythagorean Life*,⁴¹ confirming the interest of the philosopher from Chalcis in presenting the conservative ethics of the Pythagoreans as a guarantee of a correct way of living.⁴²

Precisely these late sources, and in particular Iamblichus, who seems to corroborate what is briefly affirmed in Aristoxenus fr. 26 Wehrli,⁴³ have led to the belief that the early Pythagoreans formulated a true theory of catharsis⁴⁴ that constituted one of the canons of the βίος Πυθαγορικός. On the other hand, several pieces of evidence independent of the Neoplatonic biographies and suggesting an interest of the early Pythagoreans in musical therapy have been overlooked.

⁴¹ See esp. *VP* 174–5, 183 and 205.

⁴² However, Porphyry and Iamblichus were influenced by Aristoxenus not only directly (in Burkert [1972] 101 it is assumed that Iamblichus, as well as Stobaeus, may have personally read Aristoxenus' *Pythagorean Precepts*), but, indeed above all, through Nicomachus of Gerasa, a neo-Pythagorean musicologist and mathematician who lived in the 1st century CE and was also the author of a *Life of Pythagoras* (nothing has survived of this work, but both Porphyry, who quotes Nicomachus in *VP* 20 and 59, and Iamblichus, see *VP* 251, must have used it extensively). Nicomachus may have been very congenial to Iamblichus because of his tendency to identify Pythagoreanism and Platonism. In particular, he connected mathematics with philosophy to such an extent that number theory influenced moral philosophy (see, e.g., *Ar.* 64–5 Hoche). For Nicomachus as a source for both Porphyry and Iamblichus, see Burkert (1972) 98–10 and Staab (2002) 81–91 and 224–8.

⁴³ See Iamb. *VP* 110, εἰώθει γὰρ οὐ παρέργως τῇ τοιαύτῃ χρῆσθαι καθάρσει· τοῦτο γὰρ δὴ καὶ προσηγόρευε τὴν διὰ τῆς μουσικῆς ἰατρείαν, “Pythagoras was accustomed to use — and not occasionally — this type of catharsis; this indeed was the name he gave to musical healing.” Cf. Porph. *VP* 33, καὶ ὑγιαίνουσι μὲν αὐτοῖς αἰεὶ συνδιέτριβεν, κάμνοντας δὲ τὰ σώματα ἐθεράπευεν, καὶ τὰς ψυχὰς δὲ νοσοῦντας παρεμυθεῖτο, καθάπερ ἔφαμεν, τοὺς μὲν ἐπωδαῖς καὶ μαγείαις τοὺς δὲ μουσικῇ. ἦν γὰρ αὐτῷ μέλη καὶ πρὸς νόσους σωμάτων παιώνια, ἃ ἐπάρδων ἀνίστη τοὺς κάμνοντας. ἦν <δ’> ἃ καὶ λύπης λήθην εἰργάζετο καὶ ὀργὰς ἐπράνιεν καὶ ἐπιθυμίας ἀτόπους ἐξήρει, “and [Pythagoras] paid attention to his disciples’ health, he cured those who labored under physical diseases and comforted those suffering from diseases of the soul, just as we said, the former by means of sung spells and magic, the latter by means of music. Actually he had melodies that succeeded in healing the diseases of the body, and the sick got up as he sang them. He also had melodies that allowed people to forget pain, and he soothed wrath and removed wicked desires.” The distinction between the ἐπωδαί, sung spells for healing the body, a magic-medical remedy, and μουσική, which was used for healing the soul, is remarkable in this passage (in *VP* 30, Porphyry simply attributes the healing function of music to the incantatory power of rhythms and melodies).

⁴⁴ See above, n. 14.

For the use of music in healing, the link between the early Pythagoreans and medicine is fundamental.⁴⁵ Medicine is expressly identified in Aristoxenus fr. 26 Wehrli as cathartic therapy of the body. It is identified as a central interest of the Pythagoreans, together with music and divination, in a passage from Iamblichus that can be traced back to the *Pythagorean Precepts* (Iamb. VP 163, τῶν δ' ἐπιστημῶν οὐχ ἥκιστα φασι τοὺς Πυθαγορείους τιμᾶν μουσικὴν τε καὶ ἰατρικὴν καὶ μαντικὴν).⁴⁶ The interest of the Pythagoreans in medicine and music is also attested by the *akousmata*, in which the former is defined as “the wisest thing” (VP 82, τί σοφώτατον τῶν παρ' ἡμῖν; ἰατρική), and harmony is said to be “the most beautiful thing” (τί κάλλιστον; ἁρμονία). Their interest in dietetics, the most beneficial remedy,⁴⁷ which provides a proper arrangement of physical exercise, food and rest (VP 163 = 244, συμμετρίας πόνων⁴⁸ τε καὶ σίτων καὶ ἀναπαύσεως) is then a consequence of their focus on medicine. Furthermore, in a passage of Aelian (VH 4.17), which is very probably based on Aristotle's monograph on the Pythagoreans, we are told that Pythagoras wandered around cities “not to teach, but to heal” (οὐ διδάξων ἀλλ' ἰατρεύσων). As a matter of fact, precisely in the period of greatest success and liveliness of the Pythagorean sect, in Magna Graecia an important medical tradition developed, of which the most significant representative was Alcmaeon of Croton.⁴⁹ Empedocles, an admirer of Pythagoras, must also have had contacts with the

⁴⁵ Burkert (1972) 292–4.

⁴⁶ This passage, which is not included in Wehrli's edition, was traced back to the *Pythagorean Precepts* by Burkert (1972) 262 n. 113.

⁴⁷ Porphyry's *Vita Pythagorae* (32, deriving from Antonius Diogenes) refers to physical exercise as part of a daily program suited to maintaining health and serenity: Pythagoras was accustomed to walk in the sacred woods, in the calmest and most beautiful places, never alone nor with a big company, but generally, in a group of two or three. As Riedweg stresses (2005) 31, these details are reminiscent of monastic life.

⁴⁸ This is the reading of the *Laurentianus*, accepted by Burkert (1965) 25 instead of ποτῶν.

⁴⁹ During Alcmaeon's lifetime, between the 6th and the 5th centuries BCE, the Pythagoreans were the leading group ruling the city. Alcmaeon, who understood the human body in terms of a balance of opposites, is sometimes classified as a Pythagorean (D.L. 8.37 and 83 and Iamb. VP 104 and 267), but Aristotle separated Alcmaeon from the Pythagoreans (*Metaph.* 986a27–b3), and we do not have any evidence for his sharing in the Pythagorean way of life. On Pythagoreanism and medicine in Croton, see Marasco (2008).

Pythagoreans, and is linked to the medical tradition.⁵⁰ It is quite likely that Philolaus, also from Croton, in his youth came into contact with the doctrines of Alcmaeon, and that this gave an impulse to his interest in medicine.⁵¹ The importance of medicine for the ancient Pythagoreans cannot, however, be linked in any way to the formulation in the scientific sphere of a theory of catharsis. In actual fact, the first to have associated Pythagoras and his followers with the concept of purification through science is Iamblichus.⁵²

We will now examine the presence of religious and ritual catharsis in ancient Pythagoreanism in order to show that the key elements in Aristoxenus fr. 26 Wehrli, i.e., the healing of the soul and body, are not derived either from Plato's theory of musical *ethos* or from Aristotle's theory of catharsis. Our fragment, read against the background of the testimonies by Aristoxenus on *ethos*⁵³ and on music therapy, will appear then as an important confirmation of the interest of the musicologist of Tarentum in the effects of music on health and on behavior.

3. Pythagoreanism and Ritual Catharsis

The numerous attestations of cultural practices, which were handed down for centuries and resulted from a desire for purification that was felt particularly at the religious and physical levels,⁵⁴ show that the presence of "cathartic" practices among the ancient Pythagoreans does not necessarily imply that they elaborated a theory of catharsis. The fact is that catharsis is a fundamental part of the practices connected with worship of the gods. One need only think of the ritual lustrations and the intonation of paeans to Apollo by the Achaeans, when they were seeking liberation from plague in the first book of the *Iliad* (472–4). Moreover, rites intended for liberation from states of restlessness

⁵⁰ Empedocles is represented as a musical healer in Iamb. VP 113. See also Porph. VP 30 and Iamb. VP 67 = Emp. 31B129 DK. On the relationship between Empedocles and the Pythagoreans, see Burkert (1972) 289–98; Kingsley (1995) 335–47 on medicine and Trépanier (2004) 116–26.

⁵¹ See Philol. Test. A27 and A28 Huffman and Huffman's comments on them ([2005] 289–306; also see 9–11).

⁵² Burkert (1972) 211–12.

⁵³ Thoroughly studied by Eleonora Rocconi in her essay in this volume.

⁵⁴ Hoessly (2001) reviews a great amount of evidence concerning catharsis in different contexts.

and anxiety, particularly in the Dionysiac sphere, were widespread and rooted in the tradition. The presence of music in religious rites with a cathartic function is also stressed at a mythical level. In this connection, the attribution of mystical initiations (τελεταί) to the musician Orpheus is important.⁵⁵ The link between music and catharsis is also well exemplified in Thaletas of Gortyn,⁵⁶ the Cretan musician who, in accordance with an oracle, went to Sparta to free it from a plague. It is not by chance that both these musicians are connected to Pythagoras. Regarding Orpheus, the fundamental point of contact is represented precisely by initiations and purifications; regarding Thaletas, Porphyry instead (*VP* 32) refers to a Pythagorean custom involving the cathartic and apotropaic paeon (well represented by Iamblichus in *VP* 110–1). Porphyry affirms that Pythagoras, starting in the morning, harmonized his voice with the sound of the lyre and sang ancient paeans by Thaletas (ἔωθεν ... ἁρμοζόμενος πρὸς λύραν τὴν ἑαυτοῦ φωνὴν καὶ ἄδων παιάνας ἀρχαίους τινὰς τῶν Θάλητος).⁵⁷

However, it is precisely the link between Orpheus and Pythagoras that calls for the greatest attention and highlights some fundamental elements of Pythagoreanism. Ion of Chios (ca. 490–22 BCE), who seems to have been the first to have seen an affinity between Pythagoras and the Orphics, stated in the *Triagmoi* that Pythagoras wrote some poetic compositions and attributed them to Orpheus.⁵⁸ Sometimes incorrect

⁵⁵ Aristoph. *Ra.* 1032–3 and [Eur.] *Rh.* 941–9. An important source about rites handed down by Orpheus and their subdivision into τελεταί, μυστήρια, καθαρμοί and μαντεῖα is *Pap. Berol.* 44. col. 1.5–9 = 1B15a DK. As far as Orpheus is concerned, see West (1983) 1–38 and, for Orpheus and Orphism in general, Brisson (1995) and Tortorelli Ghidini (2000).

⁵⁶ [Plut.] *De mus.* 9–10 1134b–e and 42 1146b–c = Pratinas, *TGF* 4F9; Phld. *Mus.* 4.11 (coll. 18–9) 63 Neubecker = Diog. Bab. *SVF* 3.232.83–4; Arist., *Pol.* 1274a25–8 and Thiemer (1979) 124–6.

⁵⁷ Antonius Diogenes is the source of Porph. *VP* 32–3.

⁵⁸ D.L. 8.8 = Ion 36B2 DK. According to Riedweg (2005) 51, Pythagoras was so much influenced by Orphism that he may have written a religious didactic poem modeled on the Orphic *hieroi logoi* (he gives *Hier. log. hex.* 2 Thesleff as an example). He further emphasizes (75) the similarities between the Orphic cosmogony of the *Derveni Papyrus* and the Pythagorean doctrine of numbers as first principles of the world order. Nevertheless, it is doubtful that Pythagoras wrote anything (see Huffman [1999] 67). Porphyry (*VP* 57) says that “there wasn’t any writing by Pythagoras” (οὔτε γὰρ αὐτοῦ Πυθαγόρου σύγγραμμα ἦν), and that after the fire which destroyed the Pythagoreans’ house in Metapontum and caused the death of Pythagoras himself and of many among his disciples, two of them, Archippus and Lysis, were

syncretism has been set up between Orphism and Pythagoreanism, the fallaciousness of which has convincingly been demonstrated by Burkert (1982), but an important feature common to Orpheus and Pythagoras is a connection with Apollo. While the former, like Apollo, combines the characters of lyre-player and prophet (*mantis*), to the point that he was said to be the son of Apollo,⁵⁹ Pythagoras, instead, was often compared to Apollo Hyperboreus, and the belief also spread that he was a son of Apollo.⁶⁰ Further, Apollo and the Delphic cult are present in the very name of Pythagoras (Iamb. *VP* 5–9), and Aristoxenus (fr. 15 Wehrli = D.L. 8.8) appears to have affirmed that the sage received most of his ethical teaching from a Delphic priestess named Themistocleia (“she that is famous for her pronouncements”). In the city of Croton the cult of Apollo played a fundamental role.⁶¹ Another fundamental aspect of Pythagoreanism is initiation,⁶² to which the cult

able to preserve “just a few dim and hard to catch sparks of this philosophy” (ὀλίγα διέσφωσαν ζώπυρα τῆς φιλοσοφίας ἀμυδρά τε καὶ δυσθήρατα). Iamblichus (*VP* 198) maintained that authentic Pythagorean writings were very few (πάνυ γὰρ δὴ τινές εἰσιν ὀλίγοι, ὧν ἴδια γνωρίζεται ὑπομνήματα), since the Pythagoreans used to attribute every discovery to Pythagoras himself.

⁵⁹ Pind. *Pyth.* 4.176–7, ἐξ Ἀπόλλωνος δὲ φορμυγκτὰς αἰοιδᾶν πατήρ / ἔμολεν, εὐαίνητος Ὀρφεύς, “from Apollo came the father of songs, the widely praised minstrel Orpheus” (trans. Race [1997]), and *Scholia in Pindari Pythia* 4.313a.

⁶⁰ Iamblichus (*VP* 7), however, rejects this opinion.

⁶¹ See esp. Giangiulio (1989) 79–92 and 134–60 and Giangiulio (1994).

⁶² See Burkert (1972) 176–80 for the connections between early Pythagoreanism and the mysteries. Riedweg (2005) preface, x, has highlighted the strong relationship between the secrecy of Pythagoras’ teachings and the rules (*akousmata*) concerning the way of life in the Pythagorean sect as well as the world of rites and initiations (see Iamb. *VP* 94 on the rule of silence concerning teachings, ἔχεμυθεῖν). Aristotle seems to bear witness to initiation within Pythagoreanism: see esp. fr. 159 Gigon (= Porph. *VP* 41): ἔλεγε δὲ τινα καὶ μυστικῶ τρόπῳ συμβολικῶς, ἃ δὴ ἐπὶ πλέον Ἀριστοτέλης ἀνέγραψεν· οἶον ὅτι τὴν θάλατταν μὲν ἐκάλει φείναιτ δάκρυον, τὰς δ’ ἄρκτους Ῥέας χεῖρας, τὴν δὲ πλειάδα μουσῶν λύραν, τοὺς δὲ πλανήτας κύνας τῆς Φερσεφόνης. τὸν δ’ ἐκ χαλκοῦ κρουομένου γινόμενον ἦχον φωνὴν εἶναι τινος τῶν δαυμόνων ἐναπειλημμένην τῷ χαλκῷ, “[Pythagoras] explained some doctrines also mystically through symbols, and Aristotle recorded a great number of them; for instance, he named the sea “a tear,” and the Big and Little Bear “Rhea’s hands,” and the Pleiades “the lyre of the Muses,” and the planets “Persephone’s dogs”; he stated that the sound from stricken bronze was the voice enclosed within one of the daemons.” The importance of *symbola* is also attested by Aristoxenus (fr. 43 Wehrli = D.L. 8.15–6, [...] εἴ τινα πύθοιτο τῶν συμβόλων αὐτοῦ κεκοινωνηκότα, εὐθύς τε προσηταιρίζετο καὶ φίλον κατεσκευαίεζεν, “if

of the Muses,⁶³ which was of particular importance to the Pythagoreans, also seems to be connected. There are testimonies regarding the consecration of the house of Pythagoras at Croton, after his death, as a temple of Demeter, while the alley was consecrated to the Muses.⁶⁴ According to another tradition,⁶⁵ Pythagoras died at Metapontum after taking shelter in the sanctuary of the Muses and remaining there without provisions for forty days.

Another connection to the Muses is apparent in the importance assigned by the Pythagoreans to memory (μνήμη). Iamblichus affirms (VP 164–6) that they exercised it with great attention and tried to preserve everything that they learned by means of it. An example of the exercise of memory and the benefits that derived from it is the custom of using selected verses (λέξεσι διελεγμέναις) from Homer and Hesiod to correct the soul (πρὸς ἐπανόρθωσιν ψυχῆς),⁶⁶ that

[Pythagoras] learned that someone shared in his *symbola* [“passwords,” according to Burkert (1972) 176], he admitted him immediately to his sect, and made friends with him”). Isocrates (*Bus.* 28 = Pythag. 14A4 DK) reports that Pythagoras paid great attention to religious rites and sacrifices.

⁶³ See, e.g., Porph. VP 31, τὰ δ' οὖν τῶν ἑπτὰ ἀστέρων φθέγματα καὶ τῆς τῶν ἀπλανῶν ἐπὶ ταύτης τε τῆς ὑπὲρ ἡμᾶς λεγομένης δὲ κατ' αὐτοὺς ἀντίχθονος τὰς ἑννέα Μούσας εἶναι διεβεβαιούτο. τὴν δὲ πασῶν ἅμα σύγκρασιν καὶ συμφωνίαν καὶ ὥσανει σύνδεσμον, ἥσπερ ὡς ἀδίου τε καὶ ἀγενήτου μέρος ἐκάστη καὶ ἀπόρροια, Μνημοσύνην ὠνόμαζεν, “[Pythagoras] maintained that the nine Muses were the sounds made by the seven planets, the sphere of the fixed stars, and besides by that which exceeds our comprehension and is called among them the “counter-earth.” He called “Mnemosyne” the composition, harmony and, as it were, bond of all of them, of which, since it is eternal and unbegotten, each Muse is a part and emanation.” On Muses, mysteries and the Pythagoreans, see Hardie (2004) 35.

⁶⁴ Porph. VP 4, τὴν δ' οἰκίαν Δῆμητρος ἱερὸν ποιῆσαι τοὺς Κροτωνιάτας, τὸν δὲ στενωπὸν καλεῖν μουσεῖον, cf. Iamb. VP 170 (the city is Metapontum). The source is Timaeus (*FGrHist* 566 F 131). In Burkert's opinion (1972) 112 n. 18, either Porphyry or more probably his intermediate source replaces Metapontum, which was probably in Timaeus' account, with Croton.

⁶⁵ Dicaearchus fr. 35a–b Wehrli = Porph. VP 57 and D.L. 8.40.

⁶⁶ Iamb. VP 164; cf. VP 111 and Porph. VP 32, where the soothing effect of both the Homeric and the Hesiodic verses is emphasized ([Pythagoras] ἐπῆδε τῶν Ὅμηρου καὶ Ἡσιόδου ὅσα καθημεροῦν τὴν ψυχὴν ἐδόξαζε). According to Delatte (1915) 109–12, these passages, together with Iamb. VP 113, prove the existence of Pythagorean anthologies of Homer and Hesiod, which had cathartic and moral aims, in the 5th and 4th centuries BCE. Aristoxenus is probably Iamblichus' and Porphyry's source here. According to Detienne (1962) 27, we have to suppose that Nicomachus was the intermediate source. He shares Bertermann's opinion (Bertermann [1913] 13) on this matter and emphasizes (26–36) the educational aspect of this Pythagorean custom.

is to say, to heal it, since reference is made to the major contribution made to health by music (ὑπελάμβανον δὲ καὶ τὴν μουσικὴν μεγάλα συμβάλλεσθαι πρὸς ὑγείαν) and spells (ἐπωδαί). The healing effects of epic verses and music are also attested in the story concerning Empedocles (Iamb. VP 113),⁶⁷ which can be traced back to Aristoxenus, as we shall see later, and can also be seen in their presence in magic formulas for averting evil. The therapy by means of the *epōde*, the “sung spell,” is first attested in the *Odyssey* (19.457), and we know that Homeric verses were used as magic formulas for several diseases.⁶⁸

Memory also returns in Pythagorean onomastics: the father of the sage was called Mnesarchus according to Porphyry (VP 1) and Mnemarchus according to Iamblichus (VP 4), who also associates this name with a son of Pythagoras (VP 265).⁶⁹ Music (μουσική), which together with medicine (ιατρική) constitutes an instrument of catharsis in Aristoxenus fr. 26 Wehrli, was also inevitably connected to the Muses. Music and medicine are all important also in the Apolline cult, in which the goal of purity is constantly present. The spread of the cult among the Pythagoreans appears to be connected with a fundamental cathartic rite of theirs, which took place in spring and involved listening to the paeon for soothing and curative purposes. This rite is attested by Iamblichus (VP 110),⁷⁰ who reports that a member of the community sat on the ground and played the lyre while others, seated in a circle around him, intoned some paeans, which allowed them to become “harmonious and orderly” (ἑμμελεῖς καὶ ἔνρυσθοι). This rite took place in spring, but in other periods of the year too, as Iamblichus makes clear, the Pythagoreans resorted to music therapy (χορῆσθαι

⁶⁷ In this story, Empedocles uses a Homeric verse and the music of the lyre to soothe the murderous rage of a young man.

⁶⁸ See, e.g., Lucian. *Cont.* 7.1–5.

⁶⁹ In the *Suda* (s.v. Ἀριστόξενοϛ = Aristox. fr. 1 Wehrli) Aristoxenus' father is called both Mnesias — a clear reference to memory — and Spintharus. Three (Mnesarchos, Mnesagetes, Mnasagoras) out of the four possible names of Archytas' father according to the same lexicon (s.v. Ἀρχύτας = Archyt. Test. A2 Huffman) refer to memory. Interesting comments on these onomastic matters can be found in Visconti (1999) 44–9, which considers Mnesias as Spintharus' nickname.

⁷⁰ Detienne (1962) 42 n. 2, in agreement with Delatte (1938) 24, considers Aristoxenus as the authority on this Pythagorean custom as well. Brisson and Segonds (1996) 183 are of the same opinion.

δ' αὐτοὺς καὶ κατὰ τὸν ἄλλον χρόνον τῇ μουσικῇ ἐν ἰατρείας τάξει), explicitly calling it “catharsis” and also using it against physical infirmities. A scholion on the *Iliad* (*Schol. Vet. in Il.* 22.391), in which mention is made of this spring musical catharsis of the Pythagoreans, comments that “in ancient times, and down to the Pythagoreans, music was called, strangely, ‘catharsis’” (ἡ πάλαι μουσική [...] μέχρι τῶν Πυθαγορ<ε>ίων ἐθαυμάζετο καλουμένη κάθαρσις), with evident reference to Aristoxenus fr. 26 Wehrli. The reference to spring is significant; the spring cathartic paeon constituted a common custom, which connected the cycles of rebirth and renewal of nature, in spring, to the health of man and, from the religious point of view, to the god Apollo.⁷¹ In particular, regarding the ability of the paeon to prevent illnesses, it seems that the spring was considered a season particularly favorable to the manifestation of disease.⁷² This passage from Iamblichus is closely connected to a testimony by the paradoxographer Apollonius (*Hist. Mirab.* 40 = Aristox. fr. 117 Wehrli),⁷³ which asserts that, in the biography of Telestes⁷⁴ written by Aristoxenus, a very strange story was told, relating to the women of Locri and Rhegium. They were in such a condition of agitation that, when they heard someone call them while they were having lunch, they suddenly jumped up and started frantically running outside the city walls. The people of Locri and Rhegium consulted an oracle about this unusual behavior and in response were told “to intone twelve spring paeans a day for sixty days” (παῖανας αἶδειν ἐαρινοὺς † δωδεκατῆς † ἡμέρας ξ'),⁷⁵ and as a result many authors of paeans arose in these places afterwards. This episode thus appears to be an αἴτιον of the

⁷¹ Theognis (776–9), among others, bears witness to celebrations of Apollo in Megara in springtime. On those occasions paeans were sung.

⁷² For instance, in [Arist.] *Probl.* 1.9 860a12–34 and 1.27 862b11–15.

⁷³ This fragment is thoroughly studied by Fortenbaugh, in his essay in this volume.

⁷⁴ Probably the dithyrambic poet from Selinous, a leading exponent of the “New Music” and active between the 5th and 4th cent. BCE. Aristoxenus’ hostility toward musical innovations, especially toward the “New Music,” as we can see for instance in Aristox. fr. 124 Wehrli, does not preclude his interest in it. On this matter, see Visconti (1999) 153–6 and Power’s essay in this volume.

⁷⁵ The text in the manuscripts is corrupt. I accept West’s conjecture (1990), which is accepted also by Käppel (1992) 352, test. 139, reading δώδεκα τῆς ἡμέρας <ἐπὶ ἡμέρας> ξ'. West refers to *Il.* 1.472 as evidence for the custom of singing paeans for a prolonged time with a cathartic aim.

paean writing tradition of Magna Graecia. As Marie Delcourt⁷⁶ has shown regarding this fragment, the Pythia usually prescribed sacrifices, not paeans, in reparation of offences to gods or heroes. Since, on the other hand, we know of the ritual cathartic function associated with music by the Pythagoreans, it is no accident that this form of expiation was prescribed for the inhabitants of Locri and Rhegium, where there were Pythagorean communities. The events narrated by Aristoxenus seem to be connected with the musical catharsis of which Iamblichus speaks in *VP* 110 both by the season and also by the kind of music employed, as well as by the soothing effect that is associated with music, which has the function of inspiring internal order and dignified behavior.

Aristoxenus fr. 117 Wehrli, therefore, seems further to confirm the interest of the musicologist of Tarentum in the cathartic effects of music that appears in fr. 26 Wehrli, as well as his desire to highlight the devotion of the Pythagoreans to the ideal of a life characterized by measure and stability, in which catharsis was therapy for excesses. As we are going to see, this ideal is confirmed by the *Pythagorean Precepts* and can also be found in some fragments of the Presocratics, so that it does not have to be explained by reference to Plato's *paideia* and his consideration of body and soul as distinct but also complementary to one another.

4. The Pythagoreans and Ethics

It is primarily the distinction between body and soul in Aristoxenus fr. 26 Wehrli that has led scholars to regard the fragment as dependent on Plato.⁷⁷ Of course, the Athenian philosopher often calls attention to the strong relationship between body and soul as far as education (*paideia*) is concerned.⁷⁸ In the *Republic* (404e3–5), for instance,

⁷⁶ Delcourt (1998²) 234–5.

⁷⁷ See for instance Hoessly (2001) 183.

⁷⁸ See for instance *Rep.* 376e2–4, τίς οὖν ἡ παιδεία; ἢ χαλεπὸν εὐρεῖν βελτίω τῆς ὑπὸ τοῦ πολλοῦ χρόνου ἡγρημένης; ἔστιν δέ που ἡ μὲν ἐπὶ σώμασι γυμναστική, ἡ δ' ἐπὶ ψυχῇ μουσική, “and so, which education? It is difficult to find one better than that found a long time ago: I mean gymnastic for the body and music for the soul.” Cf. *Phdr.* 270b4–9, where Socrates states that “as for medicine, it is necessary to determine the *physis* of the body, so for rhetoric it is necessary to determine the *physis* of the soul, if our aim is . . . to obtain health and vigor by means of remedies and food as far as the body is concerned, and to transmit persuasion and virtue to the soul

the simplicity (ἀπλότης) of music is said to produce temperance (σωφροσύνη) in the soul, and that of gymnastics to produce health in the body, unlike variety (ποικιλία), which, instead, is a cause of disorder (ἀκολασία).⁷⁹ In *Charmides* (156e), Socrates states that he learned from physicians of Thrace that it is not possible to take care of the body separately from the soul (156e1–2, οὐ δεῖ ἐπχειρεῖν ἰᾶσθαι [...] σῶμα ἄνευ ψυχῆς); otherwise serious errors are committed. Thus most Greek physicians do not succeed in getting the better of many diseases, because they only take an interest in single parts, considering a person like a fragmented reality and not realizing that the soul is the origin of all evil and good regarding the body.⁸⁰ At all events, such a distinction between the healing of the soul and the healing of the body, together with a consideration of their complementarity, goes back long before Plato. Such a view was widespread in Greek culture and was one of the fundamental elements in medical thought. Body and soul are distinguished as regards therapy, for instance, in a fragment of Democritus (68B31 DK = Clem. *Paed.* 1.6 [1.93.15 Stählin]), which appears very close to the formulation in Aristoxenus fr. 26 Wehrli, although it is wisdom (σοφία) and not music that cures the soul: “medicine, according to Democritus, cures illnesses of the body, wisdom frees the soul from passions” (ιατρικὴ μὲν γὰρ κατὰ Δημόκριτον σώματος νόσους ἀκέεται, σοφίη δὲ ψυχὴν παθῶν ἀφαιρεῖται).⁸¹ Gorgias too distinguishes body and soul, affirming,

by means of discourses and occupations conformable to laws” (ἐν ἀμφοτέραις δεῖ διελέσθαι φύσιν, σώματος μὲν ἐν τῇ ἐτέρᾳ, ψυχῆς δὲ ἐν τῇ ἐτέρᾳ, εἰ μέλλεις, μὴ τριβῇ μόνον καὶ ἐμπειρίᾳ ἀλλὰ τέχνῃ, τῷ μὲν φάρμακα καὶ τροφὴν προσφέρων ὑγίειαν καὶ ῥώμην ἐμποιῆσειν, τῇ δὲ λόγους τε καὶ ἐπιτηδεύσεις νομίμους πειθῶ ἢ ἂν βούλῃ καὶ ἀρετὴν παραδῶσειν).

⁷⁹ Cf. *Rep.* 411e–412a: the gods gave human beings music and gymnastic so that these would harmonize the one with the other and help them as far as courage and philosophy are concerned, and not for soul and body in themselves. Therefore, in Plato’s opinion, the best musician is not the one who can best tune a musical instrument, but the one who is able to blend skillfully gymnastic and music. Music is not useful in itself. It must have an aim, and is part of a process of education and improvement.

⁸⁰ On this aspect of the dialogue, see Coolidge (1993).

⁸¹ Cf. *Gorg. Hel.* 1, κόσμος πόλει μὲν εὐανδρία, σώματι δὲ κάλλος, ψυχῇ δὲ σοφία, “abundance of good men adorns the city, while beauty adorns the body, and wisdom is the ornament of the soul [...]”. On the perfection of the soul as a source of advantages for the body, and not the other way round, see Democr. 68B187 DK, ἀνθρώποις ἀρμόδιον ψυχῆς μᾶλλον ἢ σώματος λόγον ποιεῖσθαι· ψυχῆς μὲν

in the *Encomium of Helen* (14), that “the same relationship exists between the power of a discourse and the disposition of the soul, and between the action of medicines and the nature of the body” (τὸν αὐτὸν δὲ λόγον ἔχει ἢ τε τοῦ λόγου δύναμις πρὸς τὴν τῆς ψυχῆς τάξιν ἢ τε τῶν φαρμάκων τάξις πρὸς τὴν τῶν σωμάτων φύσιν).

Therefore, medicine provides remedies for the body both in Aristoxenus fr. 26 Wehrli and in these two fragments, while the soul is healed by *mousikē*, *sophia* and *logos* respectively, so that the healing of the soul by means of philosophy is already attested to independently of Plato⁸² in the Presocratics. Furthermore, Aristoxenus’ testimony defines as catharsis both medicine’s treatment of the body and music’s care for the soul, suggesting some autonomy of the body from the soul, but at the same time highlighting their interdependence. Indeed, Pythagorean therapy is defined as catharsis on the basis of the close connection between them. Thus, in this sense it can be affirmed — analogously to what Huffman has shown for Pythagorean moral philosophy as it is found in the fragments of the *Pythagorean Precepts* — that the distinction between therapy of the body and therapy of the soul in fr. 26 Wehrli is not necessarily derived from Platonic presuppositions, but is connected with a way of seeing things that is widespread. Apart from the above mentioned fragments, this outlook is attested also in testimonies concerning the Pythagoreans that have connections to Aristoxenus. For instance, some words are attributed to Pythagoras both by Porphyry and also by Iamblichus, for which Porphyry (VP 22 = Iamb. VP 34 = Aristox. fr. 17 Wehrli) indicates Aristoxenus as his source. Pythagoras, who had succeeded in eliminating discords and rebellions in different cities in Magna Graecia,⁸³

γὰρ τελεότης σκήνεος μοχθηρίην ὀρθοῖ, σκήνεος δὲ ἰσχὺς ἄνευ λογισμοῦ ψυχὴν οὐδὲν τι ἀμείνω τίθησιν, “it better suits men to pay attention to the soul rather than the body. For, the perfection of the soul heals the bad condition of the body, while the strength of the body without reasoning does not improve the soul in anything.” The relationship between Democritus and Pythagoreanism has been dealt with, for example, by Boyancé (1937) 176–82; Wehrli (1951) 55–61 and Burkert (1972) 292.

⁸² See the famous passage in *Phaedo* in which φιλοσοφία is defined as “the highest music” (61a3–4, μεγίστη μουσική), and φρόνησις is considered as purification (69c2–3, καθαρμός).

⁸³ Some sources report that Pythagoras led the people of Croton from a disorderly and lascivious way of life to a moderate one (see, e.g., Giangiulio [1989] 305–8).

asserts the absolute need to eradicate by all means “illness from the body” (ἀπὸ μὲν σώματος νόσον), “ignorance from the soul” (ἀπὸ δὲ ψυχῆς ἀμαθίαν), “immoderation from the belly” (κοιλίας δὲ πολυτέλειαν), “rebellion from the city” (πόλεως δὲ στάσιν), “discord from the house” (οἴκου δὲ διχοφροσύνην) and “together the lack of measure from all things” (ὁμοῦ δὲ πάντων ἀμετρίαν).⁸⁴ This passage expresses a disapproval of excess (ἀμετρία), which is analogous to that in Aristoxenus’ *Pythagorean Precepts*, in no uncertain terms. The lack of measure takes many shapes, revealing itself as illness (νόσος) in the body, as ignorance (ἀμαθία) in the soul, and also as sedition (στάσις) and discord (διχοφροσύνη) in the city and household. Even the mention of ignorance (ἀμαθία), which might seem to bring this Aristoxenian fragment near to Plato, and in particular to the *Sophist*,⁸⁵ is rather Presocratic in its origin. We can think, for instance, of the strong relationship between ἀμαθία and ἀμαρτία, the “error” which also becomes “guilt,” in the fragments of Democritus and Gorgias.⁸⁶ On the other hand, the mention of catharsis as a purge of noxious defilements in the *Sophist* is inspired by the old medical and religious notion of catharsis. However, of these two elements, ἀμαθία and ἀμετρία, the latter is more relevant to our topic. As a matter of fact, the disapproval of ἀμετρία, which is the

⁸⁴ Cf. Democr. 68B285 DK, γινώσκειν χρεὼν ἀνθρωπίνην βιοτὴν ἀφανοῖν τε εὐοῦσαν καὶ ὀλιγοχρόνιον πολλῇσιν τε κηροῖ συμπεφυρμένην καὶ ἀμχανίησιν, ὅκως ἄν τις μετρίης τε κτήσιος ἐπιμέληται καὶ μετρήται ἐπὶ τοῖς ἀναγκαίοις ἢ ταλαιπωροῖ, “it is necessary to be aware that human life is uncertain and short, disfigured by many disgraces and helplessness, to such a degree that one should aim at a moderate wealth and distress may be proportionate to the necessities of life.”

⁸⁵ See *Sph.* 226d–231c, in which ignorance (ἄγνοια), in the form of “lack of culture” (ἀμαθία, 229c–d), is considered the main source of harm to the soul. The stranger who is the protagonist of the dialogue proposes remedying it through ἔλεγξις (“refutation”), which he affirms to be “the greatest and the most powerful of purifications” (230d7–8, τὸν ἔλεγχον λεκτέον ὥς ἄρα μεγίστη καὶ κυριωτάτη τῶν καθάρσεων ἐστὶ). Cf. *Ti.* 86b2–4, in which the disease of the soul is folly (ἄνοια), characterized in turn as “madness” (μανία) and “ignorance” (ἀμαθία), and Procl. *In Plat. Alc.* I 280.12–8, in which ἔλεγξις and κάθαρσις follow one another for those who practice philosophy.

⁸⁶ See Democr. 68B83 DK, ἀμαρτίας αἰτία ἡ ἀμαθία τοῦ κρέσσονος, “ignorance of what is better is responsible for guilt” and Gorg. *Hel.* 1, ἴση γὰρ ἀμαρτία καὶ ἀμαθία μέμφεσθαι τε τὰ ἐπαινετὰ καὶ ἐπαινεῖν τὰ μωμητὰ, “guilt and ignorance are actually the same thing, and also to blame what should be praised, and to praise what should be blamed.”

contrary of συμμετρία, reflects a widespread attitude. Democritus (68B70 DK) maintained that “immoderate desires are peculiar to children, and not to men” (παιδός, οὐκ ἀνδρὸς τὸ ἀμέτρως ἐπιθυμεῖν), and in the *Pythagorean Precepts* (Aristox. fr. 33 Wehrli = Iamb. *VP* 174–5), in which τάξις and συμμετρία are the basic principles inspiring good behavior both in public and in private life, human beings are to submit to a superior power inspiring them with moderation and order (δεῖσθαι οὖν τοιαύτης ὑπεροχῆς τε καὶ ἐπανατάσεως, ἃφ’ ἧς ἐστὶ σωφρονισμός τις καὶ τάξις), since their disposition is naturally insolent (ὕβριστικὸν γὰρ δὴ φύσει τὸ ζῶον ἔφασαν εἶναι) and unstable because of the influence of impulses, desires and other passions (ποικίλον κατὰ τε τὰς ὁρμὰς καὶ κατὰ τὰς ἐπιθυμίας καὶ κατὰ τὰ λοιπὰ τῶν παθῶν). In another fragment of the *Pythagorean Precepts* (fr. 35 Wehrli = Stob. 4.1.49), education of individuals of all ages (ἐπιμελητέον δὲ πάσης ἡλικίας ἡγούντο)⁸⁷ is then proposed as a remedy for the natural inclination toward passions, and, therefore, as something that inspires moderation and order. An orderly rearing beginning with early childhood (δεῖν δὲ ἔφασκον εὐθὺς ἐκ παίδων καὶ τὴν τροφὴν τεταγμένως προσφέρεισθαι) provides further help, since the Pythagoreans taught that “order and proportion are beautiful and useful, while disorder and disproportion are base and harmful” (διδάσκοντες ὥς ἡ μὲν τάξις καὶ συμμετρία καλὰ καὶ σύμφορα, ἡ δ’ ἀταξία καὶ ἀσυμμετρία αἰσχρὰ τε καὶ ἀσύμφορα).⁸⁸ The same ideas are also expressed in Aristoxenus’ fragments concerning Pythagoreanism through musical language, as a consequence of the interest of the Pythagoreans in music as a model of the harmony that should always inspire men. For instance, they regarded a reproach (νουθετεῖν) as a “retuning” of passions (πεδαρτάν),⁸⁹

⁸⁷ According to the Pythagorean educational program in Aristox. fr. 35 Wehrli, children must be trained in letters and other studies (τοὺς μὲν παῖδας ἐν γράμμασι καὶ τοῖς ἄλλοις μαθήμασιν ἀσκεισθαι), while the young men must be exercised in the customs of the city and in its laws (τοὺς δὲ νεανίσκους τοῖς τῆς πόλεως ἔθεσι τε καὶ νόμοις γυμνάζεσθαι), adult men must attend to business and public service (τοὺς δὲ ἄνδρας ταῖς πράξεσιν τε καὶ δημοσίαις λειτουργίαις προσέχειν) and old men must turn back to reflection, serving as judges and giving advice with the aid of all their knowledge (τοὺς δὲ πρεσβύτας ἐνθυμήσει καὶ κριτηρίοις καὶ συμβουλίαις δεῖν ἐναναστρέφεσθαι μετὰ πάσης ἐπιστήμης).

⁸⁸ Aristox. fr. 35 Wehrli (= Stob. 4.1.49). Also see Iamb. *VP* 210–3.

⁸⁹ See Iamb. *VP* 197–8 = Aristox. fr. 30 (= 49) Wehrli = Archyt. Test. A7 Huffman (discussed below).

while concord (συμφωνία) and good proportion (εὐρυθμία) are central concepts in precepts concerning the generation of healthy children. Pythagoras said that “men should not associate with women for reproduction when full of food and drink,” for “he does not think that well proportioned and beautiful things arise from intercourse that is base, discordant and disordered, but things that are not at all good” (ἔλεγε δὲ καὶ μήτε τροφῆς μήτε μέθης πλήρη ταῖς γυναιξίν εἰς τὸ γεννᾶν ὁμιλεῖν, οὐ γὰρ οἶται ἐκ φαύλης καὶ ἀσυμφώνου καὶ ταραχώδους κράσεως εὐρυθμα καὶ καλὰ, ἀλλ’ οὐδὲ ἀγαθὰ τὴν ἀρχὴν γίνεσθαι).⁹⁰ Concord (συμφωνία) is also mentioned in *Corpus Hippocraticum* in connection with generation, as we can see in *De victu* 1.8.2 (6.482 Littré = *CMG* 1.2.4. 132.4–11 Joly [2003²]), in which the Pythagorean harmonic intervals are the model for the embryo’s development, and also in *De alimento* 37 (9.110 L. = 145 Joly [1972]), which discusses the “periods generally concordant for the embryo and its nourishment” (περίοδοι ἐς πολλὰ σύμφωνοι, ἐς ἔμβρυον καὶ ἐς τὴν τούτου τροφήν). The use of musical language in these Aristoxenian fragments seems then to illustrate the *akousma* according to which harmony is “the most beautiful thing” (Iamb. *VP* 82, τί κάλλιστον; ἁρμονία), showing that harmony is also apparent in moderate attitudes and behavior.

It is clear then from these references that Aristoxenus fr. 26 Wehrli did not borrow the distinction between soul and body from Plato and that it should be regarded in the same light as the other Aristoxenian fragments dealing with Pythagoreanism, rather than being interpreted through the Neoplatonic sources. Furthermore, the beneficial effects of music and the use of musical remedies are attested well before the Pythagoreans in the Homeric poems,⁹¹ which are surely closer to the Aristoxenian fragment than Plato and his clear cut distinction, in the context of education (*paideia*), between musical modes allowed within the city and modes to be banished from it. Actually Plato, except for the case of music- and dance-therapy within the Corybantic rites

⁹⁰ Aristox. fr. 39 Wehrli (= Stob. 4.37.4); transl. in Huffman (2008) 111. Cf. Iamb. *VP* 211, ὄντο γὰρ ἐκ φαύλης τε καὶ ἀσυμφώνου καὶ ταραχώδους κράσεως μοχθηρὰ γίνεσθαι τὰ σπέρματα, and Ocellus Lucanus, 52–7 Harder.

⁹¹ See *Il.* 1.472–4 (the singing of paeans to soothe Apollo’s wrath and thus to stop the plague) and *Od.* 19.456–8 (the “sung spell” — ἐπωδή — as a remedy for Odysseus’ bleeding wound). Also see *Il.* 9.186–8 (Achilles soothes his own wrath with his *phorminx* after Agamemnon’s affront).

(*Laws* 790–1), does not separate the benefits of music from education, for which just two musical modes, the Dorian and the Phrygian, are allowed in the ideal *polis* (*Rep.* 399a–c). On the contrary, Aristoxenus fr. 26 Wehrli is completely free of the basic assumptions of Plato's musical *paideia*, since there is no hint in it of specific musical modes that are considered to be beneficial.

Therefore, the musical catharsis of the soul in Aristoxenus fr. 26 Wehrli seems to refer to the mere experience of the benefits of music, rather than to musical *ēthos*. It results in moral balance and generally in a better condition of the soul, as can be seen, for instance, in an anecdote relating to Clinias, a Pythagorean, who was a contemporary of Plato.⁹² The Peripatetic Chamaeleon (fr. 4 Wehrli = fr. 6 Giordano = Athen. 623f–624a) affirms that Clinias distinguished himself by his way of living, and that “if he happened to become irritated because of anger, he took the lyre and played it. When people asked him the reason, he answered ‘I am calming down’” (Κλεινίας γοῦν ὁ Πυθαγόρειος, ὡς Χαμαιλέων ὁ Ποντικὸς ἱστορεῖ, καὶ τῷ βίῳ καὶ τοῖς ἡθεσιν διαφέρων, εἴ ποτε συνέβαινεν χαλεπαίνειν αὐτὸν δι’ ὀργήν, ἀναλαμβάνων τὴν λύραν ἐκιθάριζεν. πρὸς δὲ τοὺς ἐπιζητοῦντας τὴν αἰτίαν ἔλεγεν· “πραῦνομαι”). Both Athenaeus and Aelian (*VH* 14.23), the other source of the anecdote, connect the attitude of Clinias with that of Achilles, who in the *Iliad* (9.186–8) tries to appease his anger at Agamemnon by playing the φόρμυξ, while sitting in his tent (τὸν δ’ εὖρον φρένα τερπόμενον φόρμυγι λυγείη, 186).⁹³ These two episodes do not show self-control over passions arising as a consequence of musical *ēthos* and *paideia*,⁹⁴ but rather

⁹² According to a tendentious anecdote (D.L. 9.40 = Aristox. fr. 131 Wehrli), Clinias prevented Plato from burning Democritus’ writings.

⁹³ Clinias and Achilles are also linked together in the scholia (see Eustath. *Comm. ad Hom. Il.* 2.694 and 3.906–7 van der Valk). Achilles’ case is also mentioned in [Plut.] *De mus.* 40 1145d–e to illustrate the usefulness of music (ἡ μουσικὴ πολλὰ τοῦ χρησίου). In Detienne’s opinion (Detienne [1962] 38–46), this episode in the *Iliad* played a major role in the Pythagorean exegesis of the Homeric poems. This exegesis is attested at least since Chamaeleon, the source of the comparison between Clinias and Achilles, to whom Eustathius refers with the words τῶν τις δὲ παλαιῶν. According to Detienne (1962) 41, the comparison with Clinias makes it clear that the Pythagoreans “voyaient en Achille un parfait exemple de la purification musicale,” so that “les héros homérique ne différaient pas d’un ‘philosophe pythagoricien’” (43).

⁹⁴ Comparing this testimony by Chamaeleon to Aristox. fr. 26 Wehrli, which is contemporaneous, Wallace (1995) 18–26, so far as *ēthos* is concerned, instead identifies

illustrate the mere experience of the soothing power of music itself. In the Homeric verses the effect of music is enjoyment (τέρπειν), without any reference to *ēthos*,⁹⁵ and Clinias just maintained that music had a soothing influence on him, without any reference to a particular mode. On the other hand, the testimony concerning Clinias clearly illustrates the Pythagorean precept concerning the need to act only when one is master of oneself, and not under the control of the passions, which can be also found in a fragment of Aristoxenus' biography of Archytas (Aristox. fr. 30 [= 49] Wehrli = Iamb. VP 197–8 = Archyt. Test. A7 Huffman),⁹⁶ the source of which is Spintharus, the father of the musician himself. Aristoxenus in that passage affirms that the Pythagoreans never punished anybody when they were angry, but waited until they calmed down and returned to rationality (τὴν τῆς διανοίας ἀποκατάστασιν) before so doing. An example of this is Archytas, who, returning from a military campaign, grew angry on realizing that the overseer and the slaves on his farm had not worked in his absence, and told them to consider themselves lucky that he was angry, since, if he had been calm, they would never have been able to avoid punishment (... εὐτυχοῦσιν, ὅτι αὐτοῖς ὄργισται· εἰ γὰρ μὴ τοῦτο συμβεβηκὸς ἦν, οὐκ ἂν ποτε αὐτοὺς ἀθώους γενέσθαι τηλικαῦτα ἤμαρτηκότας). It is said that Spintharus also reported a similar episode regarding Clinias, who refused to punish someone until he had calmed down.

The mention of Clinias in this fragment is most important, since it helps to show that the anecdote in Aelian and Athenaeus is the result not of borrowing from Plato's theory of musical *ēthos*, but rather of Pythagorean interest in moral philosophy and in self-restraint. Its relationship with the anecdote concerning Archytas and the mention of Spintharus as the source of them both highlights indeed the representation of Clinias, a true Pythagorean model of self-control over passions. This anecdote from Aristoxenus' *Life of Archytas*, which has its origin in Tarentine Pythagoreanism, rather than Platonic *ēthos* and

in them the moment when the Pythagoreans first notice a connection between *ēthos* and music, and considers fr. 26 Wehrli of Aristoxenus as proof of the rapidity with which the theory of musical *ēthos* spread among fourth-century Pythagoreans (22–3).

⁹⁵ It seems worth noting that the episode of Achilles has nothing to do with *paideia*, which is not attested at the time of the Homeric poems.

⁹⁶ Also see Wehrli (1967²) 56 and Huffman (2005) 287–92.

paideia, is, therefore, likely to be the source of the passages on Clinias in Aelian and Atheneus.

As we are going to see, the influence of Aristotle, whose opinions on the music of the *aulos* and enthusiastic music seem to originate from deep-rooted experience of the benefits of music therapy, may have further strengthened Aristoxenus' interest in the psychagogic effects of music. As a consequence of this, Aristoxenus may have tried to establish a relationship between his two masters, the Pythagoreans and Aristotle, by showing the former as the most authoritative and influential representatives of the empirical use of music therapy and as forerunners of Aristotelian catharsis, which was founded as well on the observation of facts. Although this is just speculation, since Aristoxenus fr. 26 Wehrli is too brief for us to have any confidence in our understanding of what Aristoxenus intended, nonetheless the crucial role of actual experience of the beneficial effects of music both for the Pythagoreans and for Aristotle may at least suggest that our fragment is closer to traditional uses of music than to the theory of musical *ethos*. Moreover, as we are going to see, the interest of the musicologist of Tarentum in the effects of music, and in particular of enthusiastic music and the music of the *aulos*, significantly helps in the interpretation of the fragment.

5. Aristoxenus and the Therapeutic Effects of the *Aulos* and Enthusiastic Music

In book 8 of the *Politics*, Aristotle distinguishes different melodies (μέλη), characterising them as “ethical” (ἠθικά), “practical” (πρακτικά) and “enthusiastic” (ἐνθουσιαστικά), and he considers their effects on human character and behavior, as well as dealing with the benefits of enthusiastic music and the *aulos*, its indispensable instrument.⁹⁷ Regarding the latter, in *Pol.* 1340a8–12 Aristotle

⁹⁷ According to Aristotle (*Pol.* 1342b1–3), “The Phrygian has the same power among the harmonies as the *aulos* among the instruments; both are characteristically frenzied and passionate” (ἔχει γὰρ τὴν αὐτὴν δύναμιν ἢ φρυγιστὶ τῶν ἁρμονιών ἦν περ αὐλὸς ἐν τοῖς ὀργάνοις· ἄμφω γὰρ ὀργιαστικά καὶ παθητικά). Therefore, Philoxenus was unable to compose the dithyramb entitled *The Mysians* in the Dorian mode, “but because of its very nature he fell back on Phrygian again, the harmony appropriate to it” (1342b10–2, ὑπὸ τῆς φύσεως αὐτῆς ἐξέπεσεν εἰς τὴν φρυγιστὶ

particularly makes reference to the melodies of Olympus as testimony to the fact that music influences the character (“but that we do become of a certain quality is evident through many things, and not least through the tunes of Olympus,” ἀλλὰ μὴν ὅτι γιγνόμεθα ποιοίτινες, φανερόν διὰ πολλῶν μὲν καὶ ἐτέρων, οὐχ ἥκιστα δὲ καὶ διὰ τῶν Ὀλύμπου μελῶν), and affirms that “it is agreed that these make souls inspired, and inspiration is a passion of the character connected with the soul” (ταῦτα γὰρ ὁμολογουμένως ποιεῖ τὰς ψυχὰς ἐνθουσιαστικὰς, ὁ δ’ ἐνθουσιασμός τοῦ περὶ τὴν ψυχὴν ἥθους πάθος ἐστίν). Subsequently (*Pol.* 1341a21–4), speaking of the need to banish from the education of young people all “professional” instruments (τεχνικὰ ὄργανα), the philosopher affirms that “the *aulos*⁹⁸ is an instrument involving not character but rather frenzy, and so is to be used with a view to those occasions when attendance has the power of [effecting] purification rather than learning” (ἐτι δὲ οὐκ ἔστιν ὁ αὐλὸς ἠθικὸν ἀλλὰ μᾶλλον ὀργιαστικόν, ὥστε πρὸς τοὺς τοιούτους αὐτῷ καιροὺς χρηστὲον ἐν οἷς ἡ θεωρία κάθαρσιν μᾶλλον δύναται ἢ μάθησιν), recognizing that this instrument has a cathartic function. Shortly after, Aristotle adds that all men, though with differing intensity, are subject to emotions (πάθη) like pity (ἔλεος), fear (φόβος) and “enthusiasm” (ἐνθουσιασμός), and that those who are particularly inclined to possession (κατοκώχιμοι) in turn get from “tunes that put the soul into frenzy” (ἐξοργιάζοντα μέλη) a “cure” (ιατρεία) and “purification” (κάθαρσις), becoming calm. The same also happens to other kinds of victims of emotion (παθητικοί), who get relief through music (*Pol.* 1342a5–15).

These observations are closely linked to reports about Aristoxenus and enthusiastic music that appear both in the pseudo-Plutarchian treatise *De musica*, and in an interesting anecdote having as its protagonist the musicologist of Tarentum (Apollon. *Hist. Mir.* 49 = Aristox. fr. 6 Wehrli). Indeed in *De musica* Aristoxenus is quoted twice as a source in relation to Olympus. In the first case Aristoxenus ascribes the invention of the enharmonic genus to the musician (11 1134f). In the second, in which the title of a treatise by Aristoxenus (Περὶ μουσικῆς) is cited, Olympus is said to have been the first to use

τὴν προσήκουσαν ἁρμονίαν πάλιν). Translations from Aristotle’s *Politics* are by Lord (1984).

⁹⁸ I prefer to use *aulos* instead of “flute,” which is Lord’s translation.

the Lydian mode, when he was composing a funeral song in honor of Python, the snake killed by Apollo at Delphi (15 1136c). The prominence that Aristoxenus conferred on Olympus in works on music that have not come down to us is also very clear from paragraph 29 (1141b), which attributes to Olympus not only the invention of *nomoi* but also the true beginning of Greek music (αὐτὸν δὲ τὸν Ὀλυμπον ἐκείνον, ᾧ δὴ τὴν ἀρχὴν τῆς Ἑλληνικῆς τε καὶ νομικῆς μουσικῆς ἀποδιδόασιν), and from the end of paragraph 11 of *De musica*, which affirms that “Olympus made music progress by introducing into it something new and unknown to his predecessors, and in this way became the founder of noble Greek music” (1135b-c = Aristox. fr. 83 Wehrli, φαίνεται δ’ Ὀλυμπος αὐξήσας μουσικὴν τῷ ἀγέννητόν τι καὶ ἀγνωστὸν ὑπὸ τῶν ἔμπροσθεν εἰσαγαγεῖν, καὶ ἀρχηγὸς γενέσθαι τῆς Ἑλληνικῆς καὶ καλῆς μουσικῆς).⁹⁹ Thus Aristoxenus appears to have made Olympus the guarantor of the nobility of ancient melodies and their ethical value, connecting these things closely with the use of a limited number of strings (ὀλιγοχορδία) and with simplicity (ἀπλότης) and dignity (σεμνότης), considered as their peculiar characteristics ([Plut.] *De mus.* 12 1135d).¹⁰⁰ These characteristics, which in Plato, for example in the third book of *Republic*, are considered the exclusive prerogative of string instruments, are also associated by Aristoxenus with the *aulos*, the instrument to which, according to the tradition, Olympus is linked.¹⁰¹ It, therefore, seems that Aristoxenus upheld the ethical and educational dignity of the ancient musical

⁹⁹ For Aristoxenus as the source of these passages of the pseudo-Plutarchian treatise *De musica*, see Meriani (2003) 78–9. Meriani follows Visconti (1999) 135–9 in attributing to Aristoxenus chs. 12 and 28–30 of the treatise. As asserted by Wehrli (1967²) 74–5, “dass Olympos mit seiner Schöpfung die edle griechische Musik begründet habe, ist Antwort auf Platons Ablehnung alles dessen, was seinem strengen ethischen Maßstab nicht entspricht.” The text of the pseudo-Plutarchian *De musica* is quoted according to Ziegler and Pohlenz’s edition (1966); translations are from Barker (1984).

¹⁰⁰ As Visconti (1999) 137–9, followed by Meriani (2003) 78, has shown, this chapter of the pseudo-Plutarchian treatise can be connected to Aristox. fr. 70 and 124 Wehrli.

¹⁰¹ In [Plut.] *De mus.* 5 1132f it is reported that Alexander Polyhistor in his *Collection of Information about Phrygia* (Συναγωγὴ τῶν περὶ Φρυγίας, *FGrHist* 273F77) “said that Olympus was the first to introduce instrumental music to the Greeks” (Ἀλέξανδρος δ’ ἐν τῇ Συναγωγῇ τῶν περὶ Φρυγίας κρούματα Ὀλυμπον ἔφη πρῶτον εἰς τοὺς Ἕλληνας κομίσαι). For κρούματα as synonym of ἀνθήματα, see Plut. *Quaest. Conv.* 2 638c and Barker (1984) 209–10 n. 30.

tradition irrespective of the instruments used, since at that time all musical performances, in their simple style devoid of decorative virtuosités, were to mirror the decorum of states of mind. As we have just seen, Aristotle (*Pol.* 1340a8–12) also emphasizes, as a fundamental characteristic of the ancient melodies of Olympus, their ability to communicate enthusiasm to the soul and thus produce a catharsis as the result of listening to enthusiastic melodies.

Thus the similarities between Aristoxenus and Aristotle regarding enthusiastic melodies are evident, on the one hand, from the importance Aristoxenus attaches to Olympus and his melodies, and on the other, from Aristoxenus' marked interest in the manifold aspects of understanding of the musical phenomenon, in relation to which, as the pseudo-Plutarchian treatise *De musica* testifies, the "perfect" musician (τέλεος μουσικός, [Plut.] *De mus.* 36 1144c)¹⁰² has to exercise his own "capacity for judgment" (κριτική δύναμις). In light of this, it is necessary for the music scholar to go beyond specialized knowledge of the elements that together constitute the object of his investigation, when exercising his critical capacity in order to judge the different musical compositions.¹⁰³ He must realize that their specific *ethos* is given "by a synthesis or by a mixture or by both" (τούτου [sc. τοῦ ἥθους] δέ φαμεν αἰτίαν εἶναι σύνθεσιν τινα ἢ μίξιν ἢ ἀμφοτέρω, [Plut.] *De mus.* 33 1143b1),¹⁰⁴ and not by consideration of single elements. The fact is that the *ethos* of the composition varies with variation in even

¹⁰² That the musicologist should not limit himself to the study of harmonics is clear from the *Elementa Harmonica* (1.1–2, 5.7–6.6 Da Rios [1954], "[harmonics] is the study of first principles, which include whatever is relevant to an understanding of *systēmata* and *tonoi*. The man who is proficient in this science should not consider anything beyond these as falling within his province; for that is the end of this branch of study. Matters investigated at a higher level, where the science of composition makes use of *systēmata* and *tonoi*, no longer belong to this science, but to the one which includes both this and the others through which all musical matters are investigated: and that is the science whose possession makes a man a musical expert," translation in Barker [1989]).

¹⁰³ [Plut.] *De mus.* 36 1144c4–6, οὐ γὰρ οἷόν τε τέλεον γενέσθαι μουσικόν τε καὶ κριτικόν ἐξ αὐτῶν τῶν δοκούντων εἶναι μερῶν τῆς ὅλης μουσικῆς, "one cannot become a complete musician and critic just on the basis of what we treat as the departments of music as a whole."

¹⁰⁴ On Aristoxenus and *ethos* in the pseudo-Plutarchian treatise, see Eleonora Rocconi's essay in this volume and Rocconi (2005).

a single element of the mixture producing it.¹⁰⁵ Hence for Aristoxenus it is necessary for the musician to be a philosopher too, since “only philosophy knows how to appraise the measure that is suited to music and its utility” ([Plut.] *De mus.* 32 1142d1–2, αὕτη γὰρ ἱκανὴ κρῖναι τὸ μουσικῇ πρέπον μέτρον καὶ τὸ χρήσιμον).¹⁰⁶ The Pythagoreans, who practiced philosophy and music at the same time, combining the theoretical study of music with a practical interest in its efficaciousness as a remedy, seem to provide a paradigm for this approach.

These affirmations appear very close to what Aristotle says in the *Politics* (1341b36–1342a4) regarding the need to practice music not for a single benefit but for many (φαμέν δ’ οὐ μίας ἔνεκεν ὠφελείας τῇ μουσικῇ χρῆσθαι δεῖν ἀλλὰ καὶ πλειόνων χάριν), since in addition to being useful for *ēthos*, which makes it useful for the education of young people, music is useful for catharsis (καὶ γὰρ παιδείας ἔνεκεν καὶ καθάρσεως) and also for relaxation (πρὸς διαγωγὴν), relief (πρὸς ἄνεσιν) and rest from efforts (πρὸς τὴν τῆς συντονίας ἀνάπαυσιν). Aristotle and Aristoxenus, therefore, seem to share an interest in the manifold expressive possibilities and effects of the different melodies,¹⁰⁷ with particular attention, as has been seen, to the Phrygian mode.

Aristoxenus’ attitude to enthusiastic music and the *aulos* is also evident in a testimony in which the musicologist himself resorts to music therapy, using precisely the *aulos*. This anecdote is part of a work by Theophrastus *Περὶ ἐνθουσιασμῶν* (*On Enthusiasms*),¹⁰⁸

¹⁰⁵ The treatise refers to the beginning of the *Nomos of Athena* ([Plut.] *De mus.* 33 1143b–d). The musician must have full knowledge of music also according to [Plut.] *De mus.* 34 1143e–f, δηλονότι <ὁ> παρακολουθῶν ταῖς τε κατὰ μέρος ἐπιστήμαις καὶ τῷ συνόλῳ σώματι τῆς μουσικῆς καὶ ταῖς τῶν μερῶν μίξεσιν τε καὶ συνθέσεσιν. ὁ γὰρ μόνον ἁρμονικὸς περιγέγραπται τρόπῳ τινί, “such a grasp [the overall grasp of matters related to the science of harmonics] belongs rather to the man who pursues both the sciences dealing with particular elements and the whole unified body of music, together with the mixtures and combinations of the elements. Anyone who is only a ‘harmonicist’ is in a way circumscribed.”

¹⁰⁶ As Meriani (2003) 60–6 has pointed out, Aristoxenus is the source of this passage.

¹⁰⁷ See also Wehrli (1967²) 69–75.

¹⁰⁸ This title could refer to a work on the origins and therapeutic effects of *enthousiasmos* and on its relationship to aulodic music and the Phrygian mode. There are two further pieces of evidence for this work of Theophrastus (Theophr. fr. 726B–C FHS&G, namely Athen. 624a–b and Aul. Gell. *Noct. Att.* 4.13). They are later than

which has not come down to us, and is reported by the paradoxographer Apollonius (2nd cent. BCE).¹⁰⁹ In the anecdote, Aristoxenus heals a man in Thebes, who became upset at the sound of the trumpet (τὸν ἐξιστάμενον ἐν Θήβαις ὑπὸ τὴν τῆς σάλπιγγος φωνήν). As he listened to the trumpet, the man “let out such cries that he behaved in an indecorous way,” (ἐπὶ τοσοῦτον γὰρ ἐβόησεν ἀκούων, ὥστε ἀσχημονεῖν). Indeed, it is explained that “if one played on the trumpet an incitement to war, his sufferings became much worse and he went mad” (εἰ δέ ποτε καὶ πολεμικὸν σαλπίζει τις, πολὺ χεῖρον πάσχειν μαινόμενον). The treatment to which Aristoxenus submits the man who has gone mad because of the trumpet (σάλπιγξ) comes about through the *aulos*. The musician “gradually reconciles him to the sound of the *aulos* and, as one might say, he gradually also made him able to bear the sound of the trumpet” (τοῦτον οὖν κατὰ μικρὸν τῷ αὐλῷ προσάγειν, καὶ ὥς ἂν τις εἴποι ἐκ προσαγωγῆς ἐποίησεν καὶ τῆς σάλπιγγος φωνὴν ὑπομένειν).¹¹⁰ Hence the trumpet (σάλπιγξ) would have devastating effects on the *psychē* and behavior of those people that are beside themselves, increasing their sufferings and disorderliness beyond all measure.¹¹¹ From the title of

Apollonius, and focus on just one disease cured with the *aulos*, sciatica. Athenaeus, but not Apollonius, also adds that the therapeutic mode was the Phrygian. See also Plin. *NH* 28.21 (whom Gellius seems to follow); Mart. Cap. 9.926 and Eustath. *Comm. ad Hom. Il.* 3.907.4–6 van der Valk. For the Theophrastan evidence concerning music therapy and *enthousiasmos*, see Matelli (2004) 160–73.

¹⁰⁹ Aristox. fr. 6 Wehrli = Theophr. fr. 726A FHS&G = Apollon. *Hist. mirab.* 49.1–3 (*Parad. Gr.* 140.262–142.275 Giannini [1966]); see also Athen. 726a. Just before the anecdote concerning Aristoxenus, quoting Theophrastus as his source, Apollonius said that precisely in the work *Περὶ ἐνθουσιασμών* Theophrastus himself affirmed that “music cures many of the ills that affect the soul and the body, such as fainting, fright and prolonged disturbances of mind. For the playing of the *aulos*, he says, cures both sciatica and epilepsy” (Θεόφραστος ἐν τῷ περὶ ἐνθουσιασμών ... φησὶ ... τὴν μουσικὴν πολλὰ τῶν ἐπὶ ψυχὴν καὶ τὸ σῶμα γιγνομένων παθῶν ἰατρεῖν, καθάπερ λιποθυμίαν, φόβους καὶ τὰς ἐπὶ μακρὸν γιγνομένας τῆς διανοίας ἐκστάσεις. Ἰάται γὰρ, φησὶν, ἢ καταύλησις καὶ ἰσχιάδα καὶ ἐπληψίαν, trans. in FHS&G). The whole passage from Apollonius has been studied in detail by Fortenbaugh in his essay in this volume.

¹¹⁰ On the meaning of this text, which is partially corrupt, and its interpretation, especially with regard to Aristoxenus’ presence in Thebes, see Visconti (1999) 21–5.

¹¹¹ The trumpet was generally considered an upsetting instrument, as is also attested by Seneca as far as the Pythagoreans are concerned (*De ira* 3.9.2, *Pythagoras perturbationes animi lyra componebat* [...] *quis autem ignorat lituos et tubas concitamenta*

Theophrastus' work, it appears evident that the healing of the man, who had gone mad because of the trumpet, is produced by the enthusiastic character of the music¹¹² and comes about allopathically thanks to the *aulos*, which, unusually, has a soothing effect. Aristoxenus, moreover, soothing his patient with the sound of the *aulos*, also appears to have made him tolerant toward the sound of the trumpet (σάλπιγξ), gradually administering enthusiastic music to him and “immunizing” him against the upsetting effects that the trumpet (σάλπιγξ) produces, it seems, in those people who have never been exposed to its effect under the control of an expert on musical therapy, who “educates” people to listen.

Aristoxenus then seems to ascribe to the *aulos* the same therapeutic efficacy it has according to Aristotle; while on the other hand, as we can infer from the above quoted testimonies, he goes even further, since he seems to ascribe also to the *aulos* — and not just to stringed instruments — both psychagogical and ethical effects that play an educational role.¹¹³ As a consequence, it seems that, according to Aristoxenus, the *aulos* can also inspire moderation and restraint, as can be seen both in the story told by Apollonius,¹¹⁴ and also in a passage from

esse, sicut quosdam cantus blandimenta quibus mens resolvatur? “Pythagoras soothed the perturbations of the soul with the lyre [...] who does not know that the clarion and the trumpets are upsetting, just as some songs are soothing so that the mind gets a relaxation thanks to them?”).

¹¹² Theophrastus was the author of a work *On Music* (Περὶ μουσικῆς). Porphyry preserves a long passage from its second book. That passage (*In Ptolem. Harm.* 1.3 61.16–65.15 Düring = Theophr. fr. 716 FHS&G), beginning with the definition of the nature of music, is our main evidence on Theophrastus' musical thought.

¹¹³ See Aristox. fr. 123 Wehrli = Strab. 1.2.3, διὰ τοῦτο καὶ τοὺς παῖδας αἱ τῶν Ἑλλήνων πόλεις πρῶτιστα διὰ τῆς ποιητικῆς παιδεύουσιν, οὐ ψυχαγωγίας χάριν δῆπουθεν ψιλῆς, ἀλλὰ σωφρονισμοῦ. ὅπου γε καὶ οἱ μουσικοὶ ψάλλειν καὶ λυρίζειν καὶ αὐλεῖν διδάσκοντες μεταποιοῦνται τῆς ἀρετῆς ταύτης. παιδευτικοὶ γὰρ εἶναι φασὶ καὶ ἐπανορθωτικοὶ τῶν ἡθῶν. ταῦτα δ' οὐ μόνον παρὰ τῶν Πυθαγορείων ἀκούειν ἐστὶ λεγόντων, ἀλλὰ καὶ Ἀριστόξενοσ οὕτως ἀποφαίνεται, “for this reason, Greek cities bring the young people up first through poetry not indeed just for winning their soul, but for inducing moderation. For musicians also lay claim to this virtue as they teach how to play harps, lyres and the *aulos*. They maintain, in fact, that these studies discipline and correct the character. You may hear such arguments not just from the Pythagoreans, but Aristoxenus also declares the same thing.”

¹¹⁴ Fortenbaugh in his essay in this volume compares this text with Pol. *Hist.* 4.20–1 (on the military education of the Arcadians; this passage is also taken into account by

Iamblichus' *On the Pythagorean Life* (112)¹¹⁵ of which the source may be Aristoxenus himself.¹¹⁶ In that passage, Pythagoras successfully uses music to calm the fury of a drunken youth, who wanted to set on fire the door of the house of a rival in love. The young man was incited in his violent intentions not only by the effects of wine but also by a Phrygian melody played by an aulos player (ἐξήπτετο γὰρ καὶ ἀνεξωπυρεῖτο ὑπὸ τοῦ Φρυγίου αὐλήματος), and Pythagoras, who was there observing the stars, succeeded in appeasing this violent behavior by ordering the aulos player to change to a spondaic melody¹¹⁷ (τὴν εἰς τὸν σπονδειακὸν μεταβολὴν ὑπέθετο τῷ αὐλητῇ).

These same soothing and balancing effects of music on drunkenness are also found at the end of the pseudo-Plutarchian treatise *De musica*, where the utility of music at banquets is affirmed¹¹⁸ and a verse from the *Odyssey* is quoted (1.152), which asserts that “song and

Rocconi in her essay in this volume). For Aristotle, however, the *aulos* does not have any share in education (*Pol.* 1341a21–4, οὐκ ἔστιν ὁ αὐλὸς ἠθικὸν ἀλλὰ μᾶλλον ὀργιαστικόν, ὥστε πρὸς τοὺς τοιούτους αὐτῷ καιροὺς χρηστὸν ἐν οἷς ἡ θεωρία κάθαρσιν μᾶλλον δύναται ἢ μάθησιν, “the *aulos* is an instrument involving not character but rather frenzy, and so is to be used with a view to those occasions when looking on has the power of [effecting] purification rather than learning”).

¹¹⁵ See also *VP* 195. Fortenbaugh also refers to this anecdote in his essay in this volume.

¹¹⁶ Pythagoras is often the protagonist (*Cic. De suis consiliis* fr. 2 Orelli [4.992] apud Augustin., *Contra Iulianum Pelag.* 5.5.23; Philodem. *De mus.* 3 (?), Pap. Herc. 1576 fr. 1.57–8.16ff. Kemke; Quint. *Inst. Or.* 1.10. 32; Sext. Emp. *Adv. Math.* 6.8; Boeth. *De mus.* 1.1 185.11–17 Friedlein), while in a different version it is Damon (Galen. *De plac. Hipp. et Plat.* 5.6.21 [CMG 5.453.2–6 Mueller] and Mart. Cap. 9.926). Galen, in contrast to other sources, ascribes the soothing effects of the music of the *aulos* to the mode, the Dorian, and not to the kind of song, the *spondeion* (actually this word refers to the rhythm, not to the mode).

¹¹⁷ In [Plut.] *De mus.* 11 1134f–1135c, following Aristoxenus, the invention of the enharmonic genus is ascribed to Olympus. The spondeion scale (see Winnington-Ingram [1928] and Barker [1984] 216 n. 81 and 255–6), which was used for the σπονδεῖον (a μέλος ἐπιδρώμιον, “libation tune” according to Pollux 4.79), is presented as an ancestral form of this genus. The *spondeion* is a tune for solo *aulos* (but see also Athen. 14 638a = Menaechmus, *FGrHist* 131F6, concerning Dio of Chios [according to Jan (1903) 877, the correct reading is Ion] as the inventor of *spondeion* for *kithara*). For the σπονδειακός (or σπονδειαῶν) τρόπος, the “spondaic melody,” accompanying a song, see [Plut.] *De mus.* 18–19 1137b–d and Barker (1984) 256–7. On these passages, see also Barker (2007) 100–1.

¹¹⁸ [Plut.] *De mus.* 43 1146e6, εἰ γὰρ πον [καὶ] χρησίμη, καὶ παρὰ πότον, “if music is useful anywhere, it is so when we are drinking.”

dance are the ornaments of the banquet” (μολπή τ’ ὀρχηστὺς τε· τὰ γὰρ τ’ ἀναθήματα δαιτός). This concept is corroborated by quoting Aristoxenus, who is said to have stressed that music heals the damage done by wine not only in the body but also in the soul.¹¹⁹ This passage from *De musica* and the anecdote in Iamblichus’ *VP* 112 seem to be connected not only by the reference to the exciting effects of wine, but also by their recourse to the moderating function of music. Moreover, the reference to the *spondeion* recalls [Plut.] *De mus.* 17 1137a2–3, in which, together with the melodies in honor of Ares and those in honor of Athena, *spondeia* are said to be “suited to fortifying the soul of a wise man” (ἐπιρρῶσαι γὰρ ταῦτα ἱκανὰ ἀνδρὸς σώφρονος ψυχὴν). Furthermore, the anecdote concerning the drunken young man seems to exemplify, within the frame of the cathartic effects of the *aulos*, the well-known interest of the Pythagoreans in the restraint of passions, which is represented in Aristoxenus’ *Pythagorean Precepts*. If Aristoxenus is the source of this anecdote,¹²⁰ he may have introduced the *aulos*¹²¹ into the story because of its cathartic function in religious ritual.¹²² This anecdote and the Aristoxenian passage in *De musica* 43 on the use of music in *symposia* thus exemplify the same notion of moderation insofar as they refer to the need to purify those under the influence of drunkenness and its effects.

Iamblichus’ *On the Pythagorean Life* later (113) gives another anecdote on the soothing effect of music against violence and its

¹¹⁹ [Plut.] *De mus.* 43 1146f7–1147a3 = Aristox. fr. 122 Wehrli, ἐκείνος γὰρ ἔλεγεν εἰσάγεσθαι μουσικὴν, παρ’ ὅσον ὁ μὲν οἶνος σφάλλιν πέφυκε τῶν ἄδην αὐτῷ χρησαμένων τὰ τε σώματα καὶ τὰς διανοίας, ἡ δὲ μουσικὴ τῇ περὶ αὐτὴν τάξει τε καὶ συμμετρίᾳ εἰς τὴν ἐναντίαν κατάστασιν ἄγειν τε καὶ πρᾶναι, “[Aristoxenus] said that music was introduced because, while it is of the nature of wine to send reeling the bodies and minds of those who indulge in it to the full, music, through its own order and proportion, calms them and leads them into the contrary condition.”

¹²⁰ See further below, 125–6.

¹²¹ Pythagoras’ supposed rejection of this instrument elsewhere in Iamblichus’ *De vita Pythagorica* (111) seems to arise from Platonic influence (see, e.g., *Rep.* 399d).

¹²² These passages, together with Aristox. fr. 6 Wehrli, can be compared, although the contexts are different, to Plato, *Laws* 790c–791b, in which the Corybantic frenzy is ritually healed by means of enthusiastic music and dances (790e1–2, mothers and nurses ἀτεχνῶς οἷον καταυλοῦσι τῶν παιδίων, just as the women performing the Corybantic rites “charm” those people taking part in them). As pointed out by Fortenbaugh in his essay in this volume, both in this passage in the *Laws* (esp. 790e8–791b1) and in Aristox. fr. 6 Wehrli, fear is the emotion to be healed.

ability to instill rationality and self-control. The protagonist, this time, is Empedocles. One day he had a guest at home and succeeded in calming the murderous rage of a young man, whose father had been previously condemned to death by this guest, singing to the accompaniment of the lyre the following verse from the *Odyssey* where a drug is described as “dispelling sorrow and anger, and making all evil forgotten” (νηπενθέξ τ’ ἄχολόν τε, κακῶν ἐπὶλήθον ἀπάντων, *Odyssey*, 4.221). Empedocles succeeds in this way both in saving his guest from being murdered and in restraining the man from doing an action that would have had a dreadful outcome for himself as well. Iamblichus stresses that, as the young man burst into Empedocles’ home, the latter was already playing the lyre to amuse his guest and just needed to change to a calming melody in order to achieve the soothing effects he wished. In Empedocles’ hands the lyre changes from a source of pleasure (τέρψις), merely aimed at entertaining, into a “therapeutic” instrument that proves effective against a psychophysical disorder appearing as a fierce fit of anger (θυμός). Therefore Empedocles keeps the young man from committing a crime by “healing” his fury, which is depicted as a disease (πάθος).

Control over the passions, particularly anger, appears to be a wholly Pythagorean motif, further reinforced in Iamblichus’ work by a testimony drawn from Aristoxenus’ *Life of Archytas*, which has Spintharus as its source (Aristox. fr. 30 [= 49] Wehrli = Iamb. *VP* 197–8 and Archyt. Test. A7 Huffman).¹²³ Aristoxenus’ authorship of this anecdote concerning Archytas suggests that Iamb. *VP* 112 and 113 may also derive in some way from him.¹²⁴ Indeed, they are clearly connected to his interest in ethics and his emphatic point that the Pythagoreans rejected every form of ἀμετρία.¹²⁵ Moreover, it is very significant that, in the passage of the *Life of Archytas*, Aristoxenus uses the verb πεδαρτάν, a compound of πεδά, Doric for μετά, and

¹²³ See also above, 115–6.

¹²⁴ The presence of Aristoxenus in the background of Iamb. *VP* 111 and 112 has been asserted by Bertermann ([1913] 6ff., quoted in Detienne [1962] 41 n. 2), whose work however has not been available to me. Although Bertermann often reads too much into the text of Iamblichus, as many scholars, for instance, Burkert (1972) 97 n. 1 and Staab (2002) 220 n. 541, have shown, in my opinion he may be right as far as these two testimonies are concerned.

¹²⁵ It is clear for instance in Porphy. *VP* 21 = Aristox. fr. 17 Wehrli (see also Iamb. *VP* 34).

ἀρτάω. As Huffman observes, this verb, which means “to change condition,” is the Doric equivalent for μεθαρμόζω, which in its musical sense, means “to change the mode” and, therefore, in a generic sense, “to make a change.”¹²⁶ In the same passage it is also stated that the Pythagoreans “called correction ‘retuning’” (ἐκάλουν δὲ τὸ νουθετεῖν πεδαρτάν),¹²⁷ and the noun πεδαρτάσεις, “corrections,” also appears in two identical passages in *VP* 101 and 231. In these passages, speaking of friendship, Iamblichus is drawing on the *Pythagorean Precepts* of Aristoxenus.¹²⁸ After affirming that, according to the Pythagoreans, it was necessary to control anger in relations of friendship, he recommends that the elderly should address to young people “those corrections and reproaches that they called ‘retunings’” (τὰς ἐπανορθώσεις τε καὶ νουθετήσεις, ἃς δὴ πεδαρτάσεις ἐκάλουν ἐκείνοι), but without in any way wounding their sensibility, so that they would learn from the reproach.¹²⁹ Hence musical terminology is also part of the technical language of correction, once again exemplifying the *akousma* that says that harmony is the most beautiful thing (Iamb. *VP* 82, τί κάλλιστον; ἁρμονία). The same thing can be also seen in the anecdote concerning Empedocles in Iamb. *VP* 113.¹³⁰ Indeed, in this passage, the participle μεθαρμοσάμενος, with which Empedocles indicates the change of melody on the lyre, clearly foreshadows the change that will correspondingly take place in the mind of the young man, who will put aside his violent desire for revenge.

The affinity between Aristoxenus and those aspects of the thought of Theophrastus that appear in Aristoxenus fr. 6 Wehrli, in turn, further confirms the importance of the reflection on the effects of music among Aristotle’s students, while, on the other hand, the fact that Aristoxenus is the protagonist of a case of musical healing, just as Pythagoras is in Iamb. *VP* 112, seems further to show his adherence to the tradition of music therapy among the Pythagoreans.

¹²⁶ Huffman (2005) 290–1.

¹²⁷ Iamb. *VP* 197, translation in Huffman (2005) 283.

¹²⁸ Huffman (2008) 105. For this attribution, Huffman agrees with Rohde (1901) 143, while Staab (2002) 331 disagrees, and Wehrli does not include this Iamblican passage in his collection of Aristoxenus’ fragments.

¹²⁹ Both in Porphyry and Iamblichus, the relationship between Pythagoras and his disciples seems to follow closely this “didactic” relationship between the old and the young.

¹³⁰ This anecdote is referred to also in Huffman (2005) 290.

6. Conclusion: Aristoxenus and the “Ethical” Interpretation of Early Pythagoreanism

The configuration of ancient Pythagoreanism as a way of life, rigidly regulated on the basis of the precepts found in the *akousmata*, is interestingly echoed in the testimonies concerning Pythagorean ethics in the Aristoxenian *Pythagorean Precepts* and is further highlighted by the reference to catharsis in Aristoxenus fr. 26 Wehrli, which has a close relationship with widespread religious and medical practices. Therefore, besides the *Precepts*, Aristoxenus’ interest in the ethics of the Pythagoreans clearly appears also in the few words that constitute our fr. 26 Wehrli, in which musical catharsis is defined as the therapy of the soul. We have seen that catharsis in the religious-ritual tradition represents an element that is operative in early Pythagoreanism, and that, in this respect, it is not at all necessary to suppose the formulation of a theory of catharsis in this sphere. On the one hand, the deep bond between Aristoxenus and the Pythagoreans, his first teachers, and his interest in music therapy indeed allow an interpretation of the fragment which does not presuppose any borrowing either from Plato’s theory of musical *ethos* or from Aristotle’s theory of catharsis. On the other hand, Aristoxenus’ admiration for the Pythagoreans and his interest in musical *ethos* accounts for his emphasis on the value of the ancient musical tradition in contrast to “modern” degenerations. Aristoxenus, in his *Life of Pythagoras*, may have intended to propose the Pythagoreans’ educational and therapeutic use of music as a “philosophical” model to oppose to the refinement and virtuosities of the “New Music,” which must have appeared to him like an end in themselves, or manifestations of pure hedonism, such as could be observed in the degenerate musical customs of the inhabitants of Poseidonia.¹³¹

Hence Aristoxenus fr. 26 Wehrli represents, on the one hand, precious testimony for the Pythagorean therapeutic use of music and its ritual connotations, and, on the other, at a time when the theory of

¹³¹ Athen. 14 632a = Aristox. fr. 124 Wehrli. Aristoxenus’ attitude in this fragment seems to reflect Plato’s censure of “theatrocracy” (*Leg.* 700a–701b). The fragment has been carefully studied by Meriani (2003) 15–48; see also Visconti (1999) 144–51. For Aristoxenus and the “New Music” cf. Them. *Or.* 33.1 364b–c = Aristox. fr. 70 Wehrli and [Plut.] *De mus.* 31 1142b–c = Aristox. fr. 76 Wehrli (on which see Visconti [1999] 130–44).

musical *ēthos* was prominent, it traces back to the Pythagoreans, as influential and authoritative representatives of the traditional use of music therapy based on experience, the conception of therapy of the soul as complementary to that of the body.

5

Aristoxenus and the “Neoclassicists”

Timothy Power

1. Introduction

Given the urgency with which he attacks the formal, sonic, and performative novelties associated with what scholars nowadays call the Athenian New Music, it is sometimes easy to forget that Aristoxenus was writing when the fractious cultural politics in which the New Music developed had long since run their course. Although some of its most prominent exponents, above all Timotheus of Miletus and Philoxenus of Cythera, lived and produced music well into the first half of the fourth century, there is little indication that their music was considered to be radical or scandalous for much of that time. The intense moral and ideological struggles that the New Music provoked during its later fifth-century zeitgeist, struggles that were played out in “real time” on the stage of Old Comedy, very likely had become for most Athenians a distant memory well before Aristoxenus took them up.¹ No longer at

¹ Other conservative intellectuals of the fourth century anachronistically engaged the New Music as well, Plato most notably. On the New Music and its fifth- and fourth-century critics, see Csapo (2004) and D’Angour (2006).

the center of a cultural crisis inflamed by “revolutionary” rhetoric, the once-controversial techniques and tendencies of the New Music settled into being an uncontroversial stylistic option, a dominant one to be sure, but, as we will see, one coexisting alongside multiple options, including the very “archaic” style conservative critics feared the New Music had destroyed.

The original compositions of its leading lights entered a period of canonization, both as texts — Plutarch writes that Alexander the Great carried with him editions of the New Dithyramb composers Philoxenus and Telestes along with those of Euripides, Sophocles, and Aeschylus (*Life of Alexander* 8.3) — and as canonized classics in a dithyrambic performance repertory.² These developments are accordingly reflected in Middle Comedy. In the *Third Actor* of Antiphanes, a character turns his invective — notably lacking the political and moral edge of Old Comedy’s music criticism — toward the vapid style of contemporary fourth-century musicians, with their “ivy-twisted, fountainsy, flower-flitting, wretched songs” and their “melodies borrowed from other pieces” (ἀλλότρια μέλη) and instead lauds Philoxenus as an absolute classic. His bold neologisms, his harmonic modulations and sonically affective “colorings” (χρώματα), all the once-controversial stylistic elements that would have provoked attacks in Old Comedy, now add up to “true *mousikē*” (fr. 207 K-A).

For Aristoxenus, however, the New Music had inflicted a cultural wound that remained open long after the music had ceased to shock the general public. As he puts it in his *Sympotic Miscellanies*, “the theaters have become thoroughly barbarized and this populist music (πάνδημος μουσική) has fallen into great degeneration” (Athen. 14.632a = fr. 124 Wehrli). Such barbarization and degeneration were rooted in the specific historical moment of the later fifth-century New Music, and musical culture had been in inexorable decline ever since then. In the same fragment, there is the devastating comparison between the speaker, perhaps Aristoxenus himself, and his friends, all conservatives at odds with the “populist music” of their day, who gather together to “remember music as it once was” — that is, the aesthetically, socially, and morally uncorrupted *arkhaia mousikē*, “classical music,” idealized by Aristoxenus (and most other Platonic and

² On the reperformance of New Dithyramb in fourth-century Athens, see Wilson (2000) 227.

Peripatetic writers on music; cf. pseudo-Plutarch *De musica* 3 1131f) — and the citizens of socially and culturally “barbarized” Poseidonia, a colonial Greek city on the Tyrrhenian gulf, who gather at a festival to weep over the irreparable loss of their Hellenic customs.³

This melancholic nostalgia, informed by a mournful fixation on an impossibly lost past, leaves us with a sense of a profound disconnection between Aristoxenus’ elitist conservatism and the demotic experience of music in the later fourth-century *polis*. In another fragment, Aristoxenus says that a life dedicated to the principles of *arkhaia mousikē* is essentially incompatible with a successful performance career in the populist theaters, which are filled with the “new and pleasing song” that delights the masses (Themistius 33.1 364b-c = fr. 70 Wehrli). Indeed, it is tempting to speculate how, for one so let down by history and so alienated from the present, the socioculturally abstracted, historically transcendent technicalities of music theory could have served as a kind of therapeutic means of settling scores and of reasserting elite mastery over the very definition of *mousikē*.⁴

But his fixation on the ideal of *arkhaia mousikē* and his contempt for the “degeneracy” caused by the now-old New Music did not prevent Aristoxenus from engaging with the living music of his time. There are indications that he remained musically *au courant*. Among his prolific output we find titles such as *On Choruses*, *On Tragedians*, *On Tragic Dance*, and *On Aulos Players*; unless these works consisted entirely of antiquarian research, we may assume that Aristoxenus occasionally got out and took in a drama, dithyramb, or concert in one of those barbarized theaters. There is also the intriguing reference to a *Life of Telestes of Selinus* (Apollon., *Marvelous Stories* 40 = fr. 117 Wehrli),

³ See discussion in the first chapter of Meriani (2003). On the split between “old” and “new” music, cf. n. 22 below. In *De musica* 27 1140d-e, it is noted with approval that in ancient times there was no knowledge of “theatrical music”; indeed, theaters had not yet even been built. Music was then devoted solely to education and worship, unlike the modern day, when degenerate theatrical music has become completely dominant. The passage echoes Aristoxenus fr. 124 Wehrli, as Barker (1984) 233 n. 174 notes, even as it recalls Plato’s critique in *Laws* 700a–701b of so-called *theatrokratia*, the warping influence on music exerted by democratic theatrical audiences. The Platonic critique of *theatrokratia* no doubt informed Aristoxenus’ own musical elitism.

⁴ Cf. Barker (2007) 234. See too Power (2007) on fifth-century music theory as already an elitist, culturally exclusionary discourse.

a biography that perhaps belonged to a larger work, *On Dithyrambic Composers*, which might have included lives of other composers relatively close in age to Aristoxenus.⁵ The most extended traces of Aristoxenus' interest in the music made in or shortly before his time are to be found in two passages of pseudo-Plutarch *De musica*, 20–1137e–1138c and 31 1142b–c. In both, we find Aristoxenus putting aside the defeatism of fr. 124 Wehrli as he discusses composers and musicians of the fourth century who work outside the tradition of the New Music and maintain instead the classical style, the *arkhaios tropos*, of which he approves.

In examining these passages, I want first to assess their evidentiary value for music history. What can they tell us about the actual complexion of fourth-century musical culture, in particular the role of a dedicated “Neoclassical” movement in it? How might Aristoxenus' own biases and agendas affect his testimony? Second, I want to consider how these passages show Aristoxenus not as one content

⁵ Cf. Wehrli (1967) 83; Visconti (1999) 153. The biography of Telestes, who was active around the turn of the fifth century (Diod. Sic. 14.46; Parian Marble, Ep. 66), gave Wehrli pause, since testimonia and fragments conspire to suggest that Telestes was an exponent of the New Dithyramb. Why or in what sense did Aristoxenus devote a biography to this star of the very modern style he despised? We can only speculate. One possibility is that for Aristoxenus the composer's biography was a form of revanchism, a hostile takeover of the legacy of the New Musicians by telling their stories in such a way as to serve an aesthetically and ethically conservative agenda. But we need not assume that the work was a hatchet job. As Huffman and Schorn argue in this volume, Aristoxenus' reputation as a malicious biographer of Socrates is probably undeserved. His treatment of Telestes may have been accordingly fairly even-handed; perhaps he recognized a divide between his “objective” work as a biographer and his opinions and agenda as a critic of musical culture. It is notable, however, that Telestes is not a name that occurs in connection with the New Music in the fragments of Aristoxenus, as do Philoxenus and Timotheus. This may suggest another possibility, that Telestes did not have the reputation for radical innovation that Timotheus and Philoxenus did. One tiny nugget in the testimonia could point in that direction. Athenaeus says that in his dithyramb *Argo* Telestes “hit back at Melanippides,” the godfather of the New Dithyramb, by disputing Melanippides' controversial myth-history of the *aulos* in the latter's *Marsyas*, and “correcting” it with a less controversial account of his own (14 616f = PMG 805). Aristoxenus might thus have viewed Telestes as a (relative) classicist (even if his music did exhibit at least some New Music traits; cf. my discussion below of the dithyrambist Telesias of Thebes). Our one fragment from the *Life of Telestes*, which deals with the early history of paeanic music in Italy, is not particularly helpful in determining the tenor of the author's attitude toward his subject.

to retreat from the contemporary music scene into passive, detached nostalgia, but as a theorist and educator eager, at least on the page, to engage and shape it, to imagine a musical culture in which practicing musicians might effectively reject the corrupting influence of the New Music and commit themselves to the continued practice of *arkhaia mousikē*. There can be no doubt that Aristoxenus was obsessed with an idealized musical past, but these texts indicate his desire to promote the feasibility of that ideal — at least at a theoretical level — in his own time.

2. *De musica* 20–1

The Aristoxenian provenance of 31 1142b-c, to which I will return later, is guaranteed by the text of *De musica* and is included in Wehrli’s collection of fragments (fr. 76). The attribution of 20–1 1137e–1138c is less certain, but there is good reason to believe that it is derived from Aristoxenus as well, or at least from an intermediate source that drew upon his works. The passage appears toward the end of a discussion, topically loose and meandering like much of the *De musica*, yet nonetheless defined by a thematic continuity, which runs from chapter 15 through 21.⁶ Its underlying theme, the aesthetic and moral superiority of dignified and simple classical music to the degenerate style of modern music, is clearly stated at the beginning of chapter 15 (1136b):

People in the olden days (οἱ παλαιοί) treated music according to its proper status (κατὰ τὴν ἄξιαν), as they treated all their other practices. But contemporary musicians (οἱ νῦν), having rejected its dignity, instead of that manly, divine-sounding music, beloved of the gods, introduce an enervated music of effeminate twittering (κωπίλῃ) to the theaters.

The distinction between a “manly” *arkhaia mousikē* and the “womanly” contemporary music of the theaters certainly seems Platonic, and indeed Plato’s proscription in *Republic* 398d-e of the Lydian mode, which is “high-pitched and suitable for lamentation” (and thus liable to render its male auditors effeminate), is cited to lend support

⁶ The character who presents the discussion in the fictive setting of Plutarchean dialogue is Soterichus, “an enthusiast not only for *mousikē*, but for the other subjects of a liberal education as well” (13 1135d).

to the distinction (15 1136b-c).⁷ Yet such gendered critique of modern music appears to have been a feature of Aristoxenian musicology as well. Themistius says that Aristoxenus “attempted to make masculine the music that had been made effeminate,” and that he “encouraged his students to give up softness (μαλθακόν) and cultivate that which is manly in their songs” (33.1 364b-c = fr. 70 Wehrli). The “effeminate twittering” of the theaters also recalls Aristoxenus’ lament over the barbarization and corruption of the theaters.⁸ It is thus entirely possible that the language and thought of 15 1136b are Aristoxenian, as is much of the subsequent commentary on the classical/new music divide that is presented through chapter 21.⁹

The Aristoxenian treatise entitled *De musica* is, in fact, cited explicitly in 15 1136c (fr. 80 Wehrli), immediately following the mention of Plato’s proscription of the Lydian mode, as an authority on that mode’s invention. Aristoxenus is mentioned again at 16 1136c (fr. 81 Wehrli, on the invention of the Mixolydian mode) and at 17 1136f (fr. 82 Wehrli), where the Plutarchean compiler cites Aristoxenus in order to disagree with his assessment of Plato’s rejection of the Lydian and Mixolydian modes: “It was not the case, as Aristoxenus asserts in the second book of his *De musica*, that Plato was ignorant (ἀγνοήσας) of the fact that there was something useful in these modes too for the proper maintenance of states.”¹⁰ This criticism prompts a spirited

⁷ Such anxieties about musical effeminacy have still deeper roots in the conservative critique of the New Music in Old Comedy, e.g., Mnesilochus’ characterization of Agathon’s dramatic music as “smelling of women” (Aristoph. *Thesm.* 131). Cf. Austin and Olson (2004) 98.

⁸ It is highly probable that the attack on Timotheus, Philoxenus, and Cræxus for “pursuing the style nowadays called crowd-pleasing and profiteering” (τὸν φιλάνθρωπον καὶ θεματικὸν νῦν ὀναμαζόμενον τρόπον διώξαντες) in *De musica* 12 1135d belongs to Aristoxenus, for whom φιλάνθρωπία may have been a (negative) programmatic critical term. Cf. Themistius 33 364c, with Barker (1984) 218 n. 95; Weil and Reinach (1900) XIV.

⁹ Cf. Meriani (2003) 79–80. In the notes to his translation of the *De musica*, Barker (1984) seems also to assume that much of chapters 15–21, including 20–1 1137e–1138c, is traceable to Aristoxenus (see esp. p. 221 n. 112); cf. Weil and Reinach (1900) XV and 73.

¹⁰ Aristotle *Politics* 8 1342a32ff. also criticizes Plato’s treatment of the modes, but the basis of the critique is fundamentally different from that of Aristoxenus. Aristotle believes that Plato should not have allowed the “Bacchic” Phrygian mode to be used alongside the “stable and manly” Dorian in the musical education of young citizens

defense that occupies the remainder of chapter 17: Plato was well trained in ἡ μουσικὴ ἐπιστήμη (“musical science”); he could not have been ignorant of the Lydian and Ionian modes, since he would have known them from tragedy; similarly, the admission of the Dorian mode into his state was an informed choice: he recognized its essential “nobility,” even though he was aware that some composers had used it in maiden and erotic songs and tragic laments.

It is impossible to say how extensive or systematic was Aristoxenus’ critique of Platonic musico-political theory in his *De musica*. It seems likely, however, that he used Platonic theory as counterpoint to his own argument that the modes in and of themselves were not necessarily sociopolitically or ethically deleterious, but rather that their sociopolitical and ethical effects were determined by how they were treated by composers.¹¹ It was this pragmatic and contextual view of the modes that Plato’s essentializing, all-or-nothing approach failed to recognize. In the course of such an argument, Aristoxenus may also have made the point that even the Dorian mode, which for Plato represented the purest expression of musical virtue, could be used in ethically dubious contexts (at least by Plato’s lights). Indeed, the information in *De musica* 17 1136f that notionally unmanly or immoderate music (maiden songs, love songs, and laments) had been set in the Dorian mode probably derives from Aristoxenus’ demonstration of the ignorance of Plato in the matter of the modes, even though it

(cf. *Rep.* 399a-c), while Aristoxenus seems to have argued that Plato was too quick to reject seemingly intemperate modes out of hand. Nevertheless, Aristoxenus’ tolerance in the matter of the modes, as Rocconi argues in this volume (cf. Gibson [2005] 114), was shared by Aristotle as well. It is true that Aristotle in one sense shows himself to be more doctrinaire than Plato in his rejection of the Phrygian from musical education. But that rejection reflects Aristotle’s more contextually nuanced thinking on musical *ēthos*; in non-paideutic contexts, he would presumably allow the Phrygian mode. On the conservative religious agenda behind Plato’s retention of the Phrygian mode, see Gostoli 1995. For a different interpretation of *De musica* 17, which suggests that Aristoxenus was not criticizing Plato, see Barker, “Did Aristoxenus write musical history?” in this volume.

¹¹ The idea that an isolated rhythmic or harmonic element such as a mode could be put to either appropriate or inappropriate use by a composer, with varying results in the *ēthos* of the final musical product, is distinctly Aristoxenian. See *De mus.* 33 1143b-c, with Barker (2007) 244–6 and Barker’s essay “Aristoxenus and the early Academy” in the present volume.

is presented by the compiler (or his source) by way of defending the latter against Aristoxenus' own criticism.¹²

The defense of Plato ostensibly continues in chapters 18–21. The example of the “composers of old” (οἱ παλαιοί) and the more recent composers, apparently rough contemporaries of Aristoxenus, who emulate the classical style is adduced to show how Plato, like these musicians, rejected certain musical structures and techniques not because he was ignorant of them, but because he made an informed choice to do so. However, one could easily forget that the underlying intent of this section is to defend Plato against Aristoxenus, since the former goes entirely unmentioned until the beginning of chapter 22, when we are summarily reminded that what we have read in 18–21 was, in fact, intended to be a defense of Plato (22 1138c). Indeed, the observations on creative deliberation and the selection of musical material in this section seem to have been drawn from a source that has little or nothing to do with Plato and yet have been rather awkwardly pressed into the rhetorical service of defending him. The original source was, I suggest, a work of Aristoxenus, in which he treated favorably the disciplined compositional process of the exponents of *arkhaia mousikē* and their archaizing emulators in his own day while denigrating the undisciplined creative choices made by the composers of the New Music and their followers. (We may recall the invidious comparison drawn between the propriety of the old-time composers and the excesses of the new in the probably Aristoxenian 15 1136b.) The compiler of *De musica* (or his source) would thus, in a convoluted fashion not out of keeping with the farraginous character of the treatise as whole, have borrowed (uncredited) Aristoxenian material on the subject of musical choice and ignorance to refute the (originally unrelated and substantially different) charge of ignorance leveled by

¹² Again, see Barker “Aristoxenus and the early Academy” in this volume. Cf. *De musica* 16 1136d (= fr. 81 Wehrli), which preserves Aristoxenus' observation that the combination of the Mixolydian and Dorian modes in tragic music creates the blend of emotionality and dignity that is characteristic of tragedy itself. We may note that the connection drawn between tragedy and the Dorian recalls the catalog of “questionable” Dorian settings in 17 1136f. Probably Aristoxenian too is the conceptually related observation in 33 1143c that one may “know” the Dorian mode in a purely formal-structural sense, as an object of harmonic analysis, but lack the aesthetic and ethical discrimination to know how to make contextually appropriate use of it. Cf. Barker (1984) 241 n. 224 and (2007) 246–7.

Aristoxenus himself against Plato. A related scenario, we saw, would seem to apply to the redeployment of what are probably Aristoxenian comments on the Dorian mode in 17 1136f.

Let us look more closely at the argumentation presented in chapters 18–21, working on the reasonable assumption that they do derive from Aristoxenus. At the beginning of chapter 18, the recurring thesis of the section is stated, that it was not “because of ignorance” (δι’ ἄγνοιαν) that the old-time composers did not indulge in the πολυχορδία, “many-notedness,” and ποικιλία, “complexity,” that the New Music made its hallmarks. Rather, the likes of Olympus and Terpander and their followers (“those who follow their προαίρεσις”) were well aware of “many notes and many styles (τρόποι).”¹³ The fact is, we are told, that the ancients deliberately refrained from using them.¹⁴ Their “few-noted and simple style (τρόπος)” was thus a matter of self-conscious and informed choice (18 1137a-b). I will return to the semantics of προαίρεσις (“choice”) in more detail below, but here I would only note, in further support of an Aristoxenian sourcing for this passage (and what follows), that ἄγνοια, “ignorance,” and προαίρεσις (hereafter *prohairesis*) are both key terms in Aristotle’s ethical vocabulary and were thus conceivably adopted by his student Aristoxenus to articulate an ethics of musical behavior.¹⁵ But why is Aristoxenus so concerned to establish the ethical knowingness of the simple archaic τρόπος (“style”), its status as the product of informed and disciplined choice rather than mere ignorance of other possibilities?

To answer that we must look at the references to fourth-century musicians in chapters 20 and 21, references that are bookended by further approbatory comments on the choices made by οἱ παλαιοί: first, that Aeschylus and Phrynichus, both shining exemplars of *arkhaia mousikē*, knew about, yet avoided the modern affectation that is the

¹³ For Aristoxenus’ interest in Olympus, see Gibson (2005) 106.

¹⁴ Similarly, we are told at 19 1137c-e that the composers of old deliberately (“not because of ignorance,” οὐ δι’ ἄγνοιαν) avoided using certain notes when employing certain scalar structures. See discussion in Barker (1984) 255–7, who assumes the Aristoxenian provenance of the passage.

¹⁵ On Aristotle’s use of ἄγνοια, in particular the locution that appears throughout these chapters of the *De musica*, (οὐ) δι’ ἄγνοιαν, “(not) because of ignorance,” see Irwin (1981) 147. The locution appears in *Elementa harmonica* 40.25 = 50.18 Da Rios, where Aristoxenus wonders whether the *harmonikoi* he criticizes hold an erroneous view δι’ ἄγνοιαν.

chromatic genus; then, that the ancients were well aware how to compose the “fragmented melodies” that were a main feature of the New Music, but exercised the *prohairesis* to reject them:

Thus anyone who said that Aeschylus or Phrynichus refrained from using the chromatic because of ignorance (δι’ ἄγνοιαν) would surely be talking nonsense. One might just as well say that Pancrates knew nothing of the chromatic genus, since on the whole he avoided it; but in a few pieces he did use it. Hence it is clear that he avoided it not because of ignorance (δι’ ἄγνοιαν) but from choice (διὰ τὴν προαίρεσιν): as he says himself, indeed, he sought to emulate the style (τρόπος) of Pindar and Simonides, and in general (καθόλου) the style (τρόπος) called the ‘archaic style’ by people nowadays.

[21] The same can be said of Tyrtaeus of Mantinea, Andreas of Corinth, Thrasyllus of Phlius, and many others. We know that all of them out of choice (διὰ προαίρεσιν) rejected the chromatic genus, modulation, the use of many notes (πολυχορδία), and many other things that were available in rhythms and modes, in types of diction, in composition and in performance. Telephanes of Megara, for example, was so strongly opposed to the *syrinx* of the *aulos* that he forbade the *aulos*-makers to build it into his *auloi*, and it was primarily for that reason that he refused to perform at the Pythian contest. In general, if we treated the fact that someone did not use a given procedure as evidence that he was ignorant of it, we should be unwittingly condemning many even of our contemporaries, the school of Dorion for instance, for not using the style of Antigeneidas, which they despise, the school of Antigeneidas for the same reason, since they reject the style of Dorion, and the singers to the *kithara* who reject the style of Timotheus, and have nearly (σχεδόν) abandoned it in favor of patchwork pieces (καττύματα) and the compositions of Polyeidus.

Again, if you study the subject of complexity (ποικιλία) correctly and from a proper familiarity with it, and compare the older compositions with those of today, you will find that complexity (ποικιλία) was practiced in the old days too. The forms of rhythmic composition used by ancient composers were more complex As to fragmented melodies, it is obvious that the ancient composers avoided them not through ignorance but from choice (οὐ δι’ ἄγνοιαν ἀλλὰ διὰ προαίρεσιν).¹⁶

¹⁶ Translation lightly adapted from Barker (1984) 225–7.

I would first make the point that, from an objective point of view, it cannot be the ancient composers who set the example for fourth-century composers in the matter of making the sort of musical choices described here, but the other way round. Aristoxenus is clearly projecting his present reality of a fragmented, multifarious musical culture, full of stylistic and technical options, onto an idealized past. (I will have more to say on such fragmentation below.)

The rhetorical intent behind this refashioning of the past has, I would argue, at least two aims. On the one hand, Aristoxenus wants to steal the thunder of the New Music by implying that all its supposedly innovative devices were, in fact, old hat; they were familiar to the ancients, who had, however, the good taste and moral judgment to avoid using them. Thus stripped of their status as pathbreaking innovators, the practitioners of the New Music style are left with nothing to distinguish them except shamefully poor decision making. Aristoxenus even engages in semantic contestation over the term *ποικιλία* (“complexity”), which had, in fact, enjoyed a privileged place in the metamusical lexicon of Archaic poetry (e.g., Pindar *Ol.* 3.8, 4.2; *Nem.* 4.14, 5.42), but by the fourth century had become firmly attached to the New Music by critics, including Aristoxenus, as well as composers.¹⁷ Aristoxenus reclaims for *arkhaia mousikē* a “correct” *ποικιλία*, distinct from the degenerate modern forms of complexity the word has come to describe. Specifically, the *ποικιλία* that was practiced by the ancients was in the less objectionable area of rhythm rather than melody, whose excess elaboration was the focus of modern music, and which had, for conservative critics, connotations of softness and effeminacy.¹⁸

On the other hand, Aristoxenus is setting up the ancients not only as positive stylistic models for right-thinking composers of the present

¹⁷ On the use of *ποικιλία* in Archaic poetry to describe artistic or musical complexity that is not necessarily innovative in itself, see Page (1955) 3; on Pindaric musical *ποικιλία*, see Barker (1995) 43–5. Aristoxenus mentions with distaste certain compositions of Philoxenus and Timotheus that are “excessively complicated” (*τὰ ποικιλώτατα*, fr. 76 Wehrli). Timotheus imagines Orpheus as a proto-modernist, lauding him as the inventor of the “tortoise-shell lyre of elaborate music (*ποικιλόμουσος*)” (*PMG* 791.221). Cf. Csapo (2004) 229 and 243 for *ποικιλία* in the context of the New Music.

¹⁸ For the explicit gendering of rhythm (male) and melody (female), cf. Aristides Quintilianus *De musica* 1.19, with comments in Csapo (2004) 242.

day, but as exemplars of proper ethical behavior in music making. In other words, it is not enough that the ancients unreflexively, “naturally,” made noble music that is itself worthy of emulation; it is not enough that their virtue be cloistered. They have to be seen as moral actors facing the same problematic array of possibilities that existed in the fourth century, and as making the sort of correct choices — even at the expense of popularity and economic success — that present-day musicians in turn must emulate. According to this scenario, then, *arkhaia mousikē* was not a default tradition, but the tested expression of a good ethical disposition. This is like imagining that Mozart and Haydn could have composed big band jazz music had they wanted to, yet they resisted the easy charms of that popular idiom and exercised admirable restraint in sticking to their rigorous classical “common practice.”¹⁹

Aristoxenus borrows the conceptually rich Aristotelian term *prohairesis* to describe the logic of the ancient composers’ creative process. The term defies easy translation, but it denotes a contextually aware and ethically loaded choice. For one scholar, “it is a matter of conscious desire and intention, a deliberate moral choice”; another emphasizes its strong sense as “ethical commitment.”²⁰ Without *prohairesis*, the moral actor is merely acting the part of a just man; *prohairesis* guarantees virtue an authenticity (cf. Aristotle *EN* 2.4 1105a29–b1). Framed as *prohairesis*, stylistic choice is thus transformed into something that goes well beyond mere musical, aesthetic, and hedonic considerations; it entails staking out and committing to a potentially difficult, but earned, authentic ethical position.²¹

¹⁹ Similarly, in another fragment preserved in the *De musica* that is almost surely derived from Aristoxenus (cf. n. 40 below), we hear of musically conservative societies such as “Sparta in the old days,” Pellene, and Mantinea — with whose highly traditional musical culture Aristoxenus was intimately familiar — choosing “just one or a very few” character-building styles (τρόποι) and rejecting the rest, with which they were, however, familiar (32 1142e–f). Far from being musically benighted, these anti-Athenses were systematically sophisticated in their ethical approach to ordering civic musical culture.

²⁰ Halliwell (1986) 151 and Chamberlain (1984) 147–57, a thorough review of the term in Aristotle. Cf. too Allen (2006) 184–9, who shows that already in its first appearances in the Aristotelian corpus, in the *Rhetoric*, *prohairesis* has ethical force (and does not simply denote neutral “choice”).

²¹ Allen (2006) is an insightful study of the appropriation of the concept of *prohairesis* by Athenian orators eager to emphasize their personal ethical commitment to the political policies they propose.

One cannot, of course, form a *prohairesis* if one is ignorant of the full range of circumstances involved in the choices one makes; the self-aware ancients were thus perfectly responsible for and committed to the music they made.

Again, the importance of forming an “archaic” musical *prohairesis*, of committing oneself to a simple τρόπος (“style,” hereafter *tropos*) while rejecting a host of possible options, properly applies to contemporary musicians, who must move in a variegated musical culture that (as Aristoxenus sees it) is an ethical and moral minefield. But it has been retrojected onto the valorized masters of *arkhaia mousikē*. These old-time musicians are thus made to supply to present-day composers not only the model *tropos*, but, rather more tendentiously, a model *prohairesis* as well. This is not to say that composers of the Archaic and early Classical periods historically did not make carefully considered choices in selecting and rejecting musical materials. They were hardly mere ciphers of tradition working without personal agency. A wide range of aesthetic, occupational, local, occasional, practical, and even moral factors must have informed their creative process. Yet the very idea that to practice music in a “traditional” or “archaic” style is a self-consciously ethical commitment (in the sense Aristoxenus conceives of it, as a dedicated *prohairesis*) is radically post-traditional, a symptom of the reflexivity and historical self-consciousness that defined the musical culture of the later fourth century.²² Music simply

²² The notion that musical preference is an ethically (and politically) fraught choice develops in the second part of the fifth century, with the rise of the New Music and the conservative resistance to it. The novelty or antiquity of a musical style had previously been relative and contingent; cf. Plato’s comments on the praise of “new songs” in *Odyssey* 1.351–2 (*Rep.* 424b–c). There emerges in the rhetoric surrounding the New Music, however, the notion that “archaic” and “new” *tropoi* are conceptual absolutes, freighted not only with entirely opposed aesthetic predispositions—critics of New Music deny its very status as *mousikē*—but also with antagonistic ideological, ethical, and political presuppositions. See, e.g., Eupolis fr. 326 K–A (with Storey [2003] 170 and 347); Aristophanes *Clouds* 966–72 and 1353–76; Plato *Rep.* 424c (Damon of Oa’s emblematic claim that nowhere are musical *tropoi* changed without the greatest sociopolitical consequences) and Timotheus *PMG* 796 (the citharode vaunts his “new songs” and rejects totally the “Old Muse”). Arguably, this definitive fracturing of musical experience, more a result of discursive than sonic innovations per se, is what was truly revolutionary about the New Music. Cf. D’Angour (2006). Yet as I discussed at the beginning of this paper, the Manichean paradigm of old versus new had passed by the later fourth century. Aristoxenus, however, operated in a perpetual crisis

did not pose the same sort of conceived-as-such ethical challenge to an Aeschylus or his audience that it did to Aristoxenus.

Aristoxenus lists a number of fourth-century composers who, in his view, have followed the archaic *prohairesis*. They have committed themselves to rejecting the varied charms of the pervasive New Music style (“the chromatic genus, modulation, the use of many notes,” etc.), as had the ancients whom they emulate. First, there is Pancrates, mentioned only here, who appears to have been active, probably as a dithyrambist and probably in Athens, in the generation before Aristoxenus. It is possible that Aristoxenus knew the works of Pancrates through reperformances as well as written texts. I presume that when Aristoxenus observes that Pancrates “himself” declared that he sought to emulate the *tropos* of Pindar and Simonides, he knows this from reading or hearing a song-text by Pancrates in which the composer made favorable mention of these choral masters. Aristoxenus clearly takes that reference to be programmatic, and so in line with the composer’s laudatory *prohairesis* to avoid the temptations of the chromatic genus. Pancrates is thus attributed the profile of an archaizing composer adhering “in general to the *tropos* people nowadays call the archaic.” Indeed, “many others,” including Tyrtaeus of Mantinea, Andreas of Corinth, and Thrasyllus of Phlius — all, like Pancrates, otherwise unattested — also cultivated this self-limiting archaic simplicity, rejecting the excessive panoply of linguistic, performative, and musical effects on offer in their time. This passage would seem to indicate the existence in the fourth century of a dedicated school or movement of reactionary “Neoclassicists.”

But the testimony raises more questions than it answers. We should wonder how authentic the “Neoclassicists’” devotion to the past really was. How ethically committed was their choice to adopt the archaic *tropos*? Was there a conservative ideological agenda underlying their activity? Were these musicians spiritual allies of elitist ideologues such as Plato and Aristoxenus, attempting in some way to actualize in the popular culture a return to the values of *arkhaia mousikē*? This would seem to be Aristoxenus’ hopeful interpretation. And this scenario is certainly not impossible, at least in the case of

mode, seeking to protect an idealized classical music from the perceived degeneracy of the (now-classic) New Music.

some composers. Based on his name and provenance alone, Tyrtaeus, from Mantinea, a region famous for its musical conservatism, was born to the mission of keeping alive the poetry and music of the past. We might even go so far as to imagine a dialogue of sorts to have taken place between archaizers and conservative theorists and critics, the latter providing an intellectual and ideological basis for the musical and rhetorical position-takings of the former.

A reflex of such a relationship may be found in an anecdotal scene related by Themistius (33.1 364b-c = fr. 70 Wehrli), in which Aristoxenus is approached by someone in his circle (τις τῶν συνήθων), presumably a practicing musician, who asks what he would gain from turning away from “the new and pleasing song” and working in the classical idiom. Aristoxenus’ frank reply, however, suggests the tenuous reality of an actual “Neoclassical” school: “You will sing less often in the theaters! For it’s not possible at the same time to be pleasing to the masses and to be ‘archaic’ (*arkhaios*) in respect to one’s field of skill and knowledge.” The tension between a consistently maintained archaic *prohairesis* and the populist demands of the fourth-century civic musical culture would surely have been great, as Aristoxenus acknowledges. Again, some composers could conceivably have sustained it. But, for most, stubborn ethical virtue would have spelled career suicide. The very obscurity of the names mentioned by Aristoxenus is telling. If Pancrates, Tyrtaeus, Andreas, and Thrasyllus were the dedicated archaists A. makes them out to be, they likely enjoyed boutique appeal at best, “singing” less often in the theaters than their less ethically committed peers.²³

This is not to say, however, that “the *tropos* people nowadays call the archaic” was rarely practiced. The phrase “people nowadays” (οἱ vûv) — and implicitly not just a few elites such as Aristoxenus — suggests that an archaic *tropos*, presumably in some synthetic, stylized form — a generic composite of musical elements associated with Pindar, Simonides, et al. — was a widely recognized style in the fourth century.²⁴ Aristoxenus claims that “many” cultivated it. But

²³ Thus in *De musica* 27 1140d-e, a passage that has an unmistakably Aristoxenian resonance (cf. n. 3 above), we read the pessimistic assessment that “all those who practice music have gone over to the music of the theater.”

²⁴ The generic quality of the fourth-century archaic *tropos* is suggested by Aristoxenus’ καθόλου (“in general”): Pancrates emulated the *tropoi* of Pindar and Simonides,

I would argue that, in fact, many practiced the archaic *tropos* without the ethical grounding of *prohairesis* that Aristoxenus ascribes to his “Neoclassicists,” that it presented itself not as a political or moral statement, but as an appealing resource for dithyrambic composers, auletes, and citharodes seeking a mode of stylistic and performative self-definition against the ποιικιλία (“complexity”) made prevalent by the increasingly canonical New Music. As such, it would have constituted a reactionary “primitivism” that was in its own way as self-consciously innovative as the music it reacted to had been, as has been the case with many revivals of “ancient music” throughout history. Thus its use was primarily strategic, motivated by the desire for professional and aesthetic distinction.

Of course, composers adopting the archaic *tropos* could have put on the persona of the old-time traditionalist, with the moral, even sociopolitical trappings it entailed (or rather what a fourth-century musician imagined it entailed). Perhaps this is what Pancrates was up to in the work that Aristoxenus cites. Even a New Music maverick such as Timotheus, who brazenly vaunts his rejection of the “Old Muse” in one composition (*PMG* 796), could also wear the mask of the traditionalist when it suited, fashioning himself in his citharodic *nomos*, *Persians*, for instance, as an heir of Orpheus and Terpander, and indeed a protector of the “Old Muse” against those who would corrupt her — that is, his own New Music rivals (*PMG* 791.213ff.).²⁵ The latter is an opportunistic pose, of course, a rhetorical stance devoid of any genuine ethical commitment, at least by Aristoxenus’ criterion. Thus, although Aristoxenus holds him to a higher standard, Pancrates’ mention of Pindar and Simonides could be nothing more than an attempt to associate himself with the indisputable classical prestige of these poets, just as Timotheus creates a prestigious lineage for his innovative music that goes back to Terpander and Orpheus. Aristoxenus’ own language perhaps hints at the reality of Pancrates’ stylistic opportunism. Rather than a prohairetic attachment, he seems to have had a casual, on-again, off-again relationship with the chromatic

and *in general* the *tropos* called the archaic (*De mus.* 20 1137f). Similarly, in our time one could specifically imitate the style of Mozart or Haydn, but, in general, a contemporary rendition of the “classical style” amounts to a composite of stereotypically “classical” stylemes that transcend the style of any one classical composer.

²⁵ Cf. Nieddu (1993) and Wilson (2004) 304–6.

genus: “On the whole he avoided it, but in a few pieces he did use it” (*De mus.* 20 1137f).

Compared to the fairly well-documented musical culture of later fifth-century Athens, the fourth-century musical scene is a relative black hole. I would contend, however, that it was broadly characterized by a non-doctrinaire, post-ideological stylistic free agency, a series of opportunistic, occasionally motivated shifts back and forth by individual composers between diverse *tropoi* and musical personae. Ironically, it is through Aristoxenus’ moralizing black-and-white lens, his attempt to impose ethical consistency where there was little or none, that we may detect the outlines of such a diverse and pluralistic musical practice taking shape throughout the century, something like what the musicologist Leonard Meyer, in describing “postmodern” musical cultures, calls “a fluctuating stasis ... a steady-state in which an indefinite number of styles and idioms, techniques and movements coexist at once.”²⁶ As a character in a play by the Middle Comedian Anaxilas puts it, “By the gods, music, like Libya, is always, year in, year out, giving birth to some new creature” (fr. 27 K-A). Again, in this polytropic environment, it is possible that certain composers did maintain an archaic *prohairesis*, but an “amoral” *polytropia* on the part of the composer was more probably the norm.

As Aristoxenus indicates, alongside the archaic *tropos* other styles arose in competition with the dominant New Music style. One major trend seems to have been the creation of musical pastiches, a style (or perhaps amalgam of styles) pioneered by the multitalented Polyeidus of Selymbria, a citharode, dithyrambist, and tragedian whose *floruit* falls sometime in the first two decades of the fourth century.²⁷ Aristoxenus makes the surprising claim that citharodes in his own time have “nearly” (σχεδόν) abandoned the style of Timotheus in favor of “καττύματα and the compositions of Polyeidus.”²⁸ The word καττύματα means

²⁶ Meyer (1967) 172.

²⁷ On the aptly named Polyeidus, cf. Parian Marble, Ep. 68 and Diod. Sic. 14.46, who adds that he was also a painter.

²⁸ [Plut.] *De mus.* 21 1138b. It is important to mark the adverb “nearly.” Despite the popular favor enjoyed by Polyeidus — an anecdote preserved in Athenaeus records that one of his pupils, Philotas, defeated a presumably aged Timotheus in a citharodic contest (8 352b) — Timotheus’ citharodic *nomoi* nevertheless continued to be reperformed well into the Hellenistic period (cf. Plut. *Phlp.* 11). In the fourth-century “steady state” I am positing, one style’s popularity may crest, but it need not eclipse the practice of another.

literally “leather shoe-patches,” but here it is likely to refer to “medleys, by contrast with structurally more organized pieces.”²⁹ We should probably connect these post-Timothean citharodic *καπτύματα* with the post-Philoxenean dithyrambic pieces described in Antiphanes’ *Third Actor*, those into which their composers “weave in melodies borrowed from other pieces” (ἐμπλέκοντες ἀλλότρια μέλη, fr. 207 K-A).³⁰ The metaphor of “inweaving” chimes with that of “patching” in *καπτύματα*. (And we might also link it with the late-fifth-century innovation of *embolima*, “inserted songs,” in drama; cf. Aristotle *Poetics* 1456a29.) What seems to be happening in the citharodic *nomos*, dithyramb, and perhaps drama as well is the recycling of stock melodies, presumably popular tunes of past and present, to cobble together musical pastiches or potpourris. The reduced emphasis placed upon original composition surely reflects the ever-increasing popularity of virtuoso citharodic and auletic performance; we may compare the freewheeling virtuoso concert culture of later nineteenth and early twentieth-century Europe and America, which privileged the musician or singer and his or her performance over the integrity of the musical work itself. At the same time, the market-driven traffic of musical material across styles, genres, and occasions typifies to the fullest the ideologically and ethically indiscriminate musical practice of the fourth century. It is notable that Aristoxenus does not criticize the pastiche style with any of the brio he brings to the New Music. It is as if it were unworthy of the respect of serious criticism, lacking even the ethical commitment to radical novelty that a Timotheus once displayed.

As for the auletes mentioned by Aristoxenus, Telephanes of Megara and Dorion, it is difficult to believe that either could have balanced the demands of sustaining a professional career and maintaining a rigorously conservative *prohairesis*. Auletes were, after all, hired hands, accompanying pieces composed primarily by others, and both of these auletes rose to great prominence by doing so.³¹ Certainly, Telephanes

²⁹ Barker (1984) 227 n. 139.

³⁰ Cf. West (1992) 372.

³¹ We know that Telephanes (born on Samos) accompanied at least two victorious dithyrambic choruses: one on Salamis (*IG* II² 3039), one in Athens with Demosthenes as choregus around 350 (Dem. *Against Meidias* 17). Wilson (2000) 161 suggests that Telephanes himself composed the dithyramb that won the prize for Demosthenes, but we cannot be sure of this.

and Dorion could have cultivated performance styles and techniques that were markedly less flamboyant and mimetic than those of Antigeneidas of Thebes and an earlier generation of auletes who made their names playing the virtuoso New Dithyrambs of Timotheus and Philoxenus. As Aristoxenus says, auletes persisted in the style of Antigeneidas into his own time. We may expect that it remained dominant, especially as the dithyrambs of these poets became canonized classics. Although Aristoxenus frames the rejection of mimetic virtuosity by Telephanes and Dorion as a principled stand against modern decadence, it is just as likely that it was a canny strategy of musical distinction. Telephanes’ refusal to perform solo at the long-standing, prestigious Pythian contest hardly seems the gesture of one committed to tradition. It smacks rather of professional politics and publicity, of a self-serving challenge to the “rules of the game” that informed the traditional culture of auletic performance. Certainly, one must doubt that it was “primarily” on account of his moral disapproval of the *syrinx*, a device that allowed the aulete to produce high-pitched mimetic sound effects, that he avoided the contest.³² In the case of Dorion, we may be skeptical about the genuineness and consistency of his rejection of the pyrotechnics of Antigeneidas. One anecdote has him mocking a mimetic set piece in Timotheus’ *Nauplius*, a musical evocation of sea storm, by claiming that he had seen a bigger storm in a boiling pot (Hegesander *Hypomnemata* in Athen. 8 338a = FHG 4.416). While the anecdote could be read as a reflection of Dorion’s principled rejection of the sensationalistic style of Timotheus, it could just as well be read as a narrative reflex of his rhetoric of professional rivalry: by mocking the ineffectiveness of Timothean musical theatrics, Dorion implies the effectiveness of his own.

To sum up my line of argument thus far: We should beware the role of authorial spin and rhetorical overgeneralization in Aristoxenus’ survey of the “Neoclassical” musicians. Although most, if not all of these musicians probably did produce music marked by certain archaizing features, the motivations of most, if not all of them for doing so are tendentiously characterized by him. Aristoxenus has, I

³² On the *syrinx*, used to imitate the hissing of the dying serpent during the *Pythian nomos*, the piece traditionally performed by competitors at the Pythian contest, see West (1992) 86 and 102–3. Aristoxenus makes a neutral mention of the especially high pitch produced by the *syrinx* in *Elementa harmonica* 1.21.

suggest, ennobled their stylistic choice, which was by and large strategically determined and professionally opportunistic, portraying it as ethically committed policy, *prohairesis*. He thereby imagines the viability of a classical music “counterculture”: *arkhaia mousikē* can thrive in the hands of principled devotees of the past masters, who are themselves depicted as exemplars of good musical *prohairesis*.

3. *De musica* 31

In our second passage from *De musica*, 31 1142b-c (= fr. 76 Wehrli), Aristoxenus treats the practical role of education and learning in insuring the continued survival of the ancient music in a culture that is hostile to it. An illustrative example from real life is adduced:

It is made clear by Aristoxenus that correct (διόρθωσις) or distorted (διαστροφή) practice has its source in training (ἀγωγή) and in teaching (μαθήσεις). Thus it happened in his own time, he says, that when Telesias of Thebes was young he was brought up on the best sort of music (ἐν τῇ καλλίστῃ μουσικῇ): among the highly reputable composers whose music he learned were Pindar, Dionysius of Thebes, Lamprus and Pratinas and as many of the lyric composers as produced good instrumental music. He also performed excellently on the *aulos*, and made a thorough study of all the other elements of a complete education (παιδεία). But when he had passed the prime of his life he was so completely seduced by the overly complex music of the theater (ἐξαπατηθῆναι ὑπὸ τῆς σκηνικῆς τε καὶ ποικίλης μουσικῆς) that he came to despise the fine compositions on which he had been brought up, and learned very carefully those of Philoxenus and Timotheus, particularly the most complicated of their pieces (τὰ ποικιλώτατα), and the ones with the maximum amount of innovation (καινοτομία). When he had then set out to compose melodies, and tried his hand at both styles (τρόποι)—that of Pindar and that of Philoxenus—he could achieve no success at all in Philoxenus’ manner. And the reason lay in the excellent training he had from his childhood.³³

³³ I follow (here and below, in excerpts from chap. 32) in large part the translation of Barker (1984) 238. I have learned much from the discussions of this passage in Barker (2007) 248–9 and 257–9 and Fongoni (2006), although my interpretation of it differs substantially from theirs.

We must again take into account Aristoxenus’ rhetorical agenda as we assess the evidentiary value of this passage for fourth-century musical history. Specifically, his desire to make a neat object lesson out of Telesias’ experience may involve a glossing over of what was very likely the deliberate stylistic free agency of this professional musician. Whereas in chapters 20 and 21 Aristoxenus assigns the “Neoclassicists” a willful *prohairesis*, here he apparently absolves Telesias of personal responsibility for his dalliance with musical modernity in order to make a point about the survival of the *arkhaia mousikē* in the contemporary world. Telesias is represented as an innocent who falls prey to the satanic glamor of the New Music, his correct practice (διόρθωσις), for a time at least, subjected to distortion (διαστροφή) by forces beyond his control. Although raised on the “best sort of music,” later in life he was “so completely seduced (ἐξαπατηθῆναι)” by the *poikilia* of popular music that he turned away from the classical repertoire on which he trained, choosing to emulate instead the most extremely modern works of Philoxenus and Timotheus.³⁴ But because *arkhaia mousikē* was bred in the bone, “correct practice” (διόρθωσις) naturally won out. Again, Aristoxenus makes Telesias the passive object of musical forces. First, he is “seduced” by the New Music; then, his good training draws him back, naturally, as it were, to the archaic *tropos*.

While there is no reason to doubt that the “real” Telesias enjoyed a traditionally grounded musical education, he nonetheless grew up to be, we may suspect, as both performer and composer, a typical practitioner of the polytropic tendency of fourth-century music, moving between archaic and modern styles as was occasionally appropriate and professionally advantageous.³⁵ As Aristoxenus himself reveals, when

³⁴ The verb ἐξαπατηθῆναι might represent a conflation of Gorgias’ theory of dramatic deception, ἀπάτη (fr. B23 DK), with the figuration of the New Music as a feminine force corrupting a masculine archaic discipline that is elsewhere elaborated by Aristoxenus (cf. fr. 70 Wehrli). For the latter idea, we may compare Plato’s notorious image in the *Laws* of the New Music composers as pleasure-possessed Bacchantes, induced to run wild over the laws of *mousikē* (700d).

³⁵ Although Aristoxenus mentions almost in passing that Telesias “also performed excellently on the *aulos*,” it is probable that he worked as a professional aulete before he became a composer (perhaps when he grew too old to meet the exacting physical demands typically placed upon the dramatic and dithyrambic aulete). The Theban aulete Oeniades, son of Pronomus, may also have transitioned later in life from a successful auletic to a compositional career: *IG II²* 3064 attests that he was the piper

Telesias embarked late in life on his compositional career, he first studied the compositions of Timotheus and Philoxenus that inspired him, yet he, nevertheless, produced works in the *tropoi* of both Philoxenus and Pindar. Aristoxenus claims that Telesias had no success with the former. That may well be, though we may question whether his failure to produce successful music in the style of Philoxenus was actually due to his classical training.³⁶ We may even be tempted to question whether Telesias was as completely unsuccessful in the modern style as Aristoxenus suggests he was. And, we might ask, in what sense was he “unable to achieve success” (μὴ δύνασθαι κατορθοῦν)? Was he unsuccessful with popular audiences, or perhaps according to some criteria of Aristoxenus’ own? The text is vague on this point.

We know nothing else of Telesias the Theban, but it is worth speculating whether he is the same Telesias who is recorded as the victorious composer-poet (*didaskalos*) on an Athenian choregic monument from the first quarter of the fourth century (*IG* II² 3029). This Telesias has been identified as an Athenian, since his name is followed by a patronymic rather than the ethnic, as we would expect with a Theban.³⁷ But this may be a peculiarity of the monument. The aulete who accompanied the winning dithyramb, Lamprias, is also given his patronymic. Perhaps both Telesias and Lamprias were sufficiently well known and regarded in Athens to merit the special designations.³⁸

for a victorious dithyramb in Athens in 384/3 BCE, while elsewhere we learn that thirty years later his own dithyramb, the *Cyclops*, was performed (Didymus on “Demosthenes” 11.22 = *PMG* 840). (Oeniades may, however, have continued to pipe in old age; see *SEG* 26 no. 220, with Wilson [2000] 367 n. 51.) His father Pronomus, himself a famous aulete of the later fifth century, also composed his own music (Paus. 9.12.5–6 = *PMG* 767). As an aulete, Telesias may have cultivated something of an “archaic” style, as did (Aristoxenus claims) Dorion and Telephanes. But, as with those auletes, we must assume that Telesias would also have piped in productions of New Dithyrambs as well. It is a reasonable presumption that his interest qua composer in studying the works of Timotheus and Philoxenus grew out of his role as accompanist to them.

³⁶ Cf. Barker (2007) 247–8 for how exactly Aristoxenus may have conceived Telesias’ training to be the cause of his failure.

³⁷ Sutton (1989) 78; cf. Wilson (1997) 175 n. 8 on the monument, with previous bibliography.

³⁸ The name of the renowned Theban *aulete* Oeniades appears with patronymic on two Athenian choregic monuments (cf. n. 35 above). On one, *IG* II² 3064, which is roughly contemporary with the monument recording Telesias’ victory, the name of the *didaskalos* also appears with a patronymic. Cf. Wilson (2000) 367 n. 51.

Dating also problematizes the identification, but it does not rule it out. The phrase in the *De musica* is “in his [Aristoxenus’] own time” (κατὰ τὴν αὐτοῦ ἡλικίαν),” which could mean that Telesias and Aristoxenus were exact contemporaries, but could as well describe a more approximate temporal relationship, with Telesias’ compositional career partially overlapping with Aristoxenus’ younger years. If our Telesias did win a victory in Athens, he could conceivably have done so with an archaizing “Pindaric” dithyramb. But given Aristoxenus’ own comments on the relative unpopularity of the archaic *tropos* in his time (fr. 70 Wehrli), we might expect that Telesias offered up something with more contemporary *poikilia* to his Athenian audience.

So is the lesson to be drawn from Aristoxenus’ compressed biography of Telesias simply that proper musical training in youth is the best hedge against modern degeneracy and thereby the most effective way to insure the vitality of the archaic style? Perhaps, but I would like to conclude by proposing that Aristoxenus may have told the story only to make the further argument that would-be “Neoclassicists” could benefit from an education that went beyond the traditional training in the classics that Telesias had received. Indeed, the Telesias story is not quite as simple as it initially looks; on closer consideration, we note a fundamental ambivalence to it. That is, the naturalizing instillation of proper musical values through early training, while beneficial in itself, was not enough to prevent διαστροφή, the distortion of his good practice. Even if his solid formation did eventually pull him back “naturally” to what is objectively fine and noble (καλόν) in music, Telesias was nevertheless lured away from it in the first place.³⁹ In other words, Telesias, innocent of the dangers that threatened to pervert his musical development, lacked ethical fortitude; he had assumed no informed and self-aware *prohairesis* for classical music that would have provided him with the moral purpose to withstand the lure of the New Music.

This problem of consistency is addressed, I suggest, in chapter 32, which Barker and others have convincingly argued contains Aristoxenian material.⁴⁰ At the beginning of the chapter, the student eager to “make noble and discriminating use of music” is advised to “imitate

³⁹ For Aristoxenus’ view on how a sense of what is musically καλόν can be instilled, see Barker (2007) 258.

⁴⁰ Barker (2007) 258–9; cf. Rocconi (2005).

the *arkhaios tropos*.”⁴¹ Aristoxenus uses the verb ἀπομμεῖσθαι “imitate,” which may be innocent enough, but in the context of a discussion about musical education, it potentially has a destabilizing effect, evoking the specter of the Platonic critique of *mimēsis*, and in turn the ethically compromised world of the theater, “acting,” and the dangerously external appearances in which they traffic.⁴² I wonder if Aristoxenus does not use ἀπομμεῖσθαι to complicate the very proposition he introduces, and thereby to question the effectiveness of overly simplistic conservative approaches to musical education, including perhaps that of Plato.

Indeed, Aristoxenus goes on to indicate that it is not enough merely to “imitate” the old style, which is essentially the result of the sort of training Telesias received. He thus prescribes an educational program in which such imitation will be meaningfully grounded: “But in addition (ἀλλὰ μὴν καὶ) [the student] should round it [music] off with the other branches of learning and take philosophy as his principal teacher, since philosophy is able to make judgments (κρίνειν) about what is appropriate and useful to music” (*De musica* 32 1142d). That is, what is needed is training that is preventive rather than only corrective, that inculcates the reflexive ability to understand (to “judge”) what constitutes good music rather than simply instills its unexamined practice. As Aristoxenus continues later in the chapter, “[A]ll learning

⁴¹ The hypothetical student addressed by Aristoxenus would seem to be one, like Telesias, training for a career in music, rather than an elite liberal arts student for whom music will remain at most an amateur activity. But it is impossible to know to what extent Aristoxenus imagines his pedagogical ideas will be applied in real-life educative situations, or will remain notional, intended ultimately for the edification of his primarily elite readership. It is worth noting, however, that fr. 70 Wehrli, discussed above, depicts Aristoxenus discussing the choice between new and old musical styles with one of his intimates, who appears to be a career musician.

⁴² On other Platonic notes struck in 32 1142c-d, see Barker (2007) 258–9. I note that the verb μμεῖσθαι appears only twice in Wehrli’s collection of fragments, in both cases to describe the lowbrow imitations performed by popular theatrical parodists (Athen. 1.19f = fr. 135 Wehrli). However, at *De musica* 18 1137b, which I argued above is derived from Aristoxenus, we read that such is the elegant simplicity of his compositions that “no one can imitate (μμεῖσθαι) the *tropos* of Olympus.” Aristoxenus presumably means that no modern musician who employs elaborate πολυχροδία and πολυτροπία can imitate it; implicitly, then, one who rejects such elaboration could imitate Olympus. But it is possible that Aristoxenus means that Olympus is absolutely inimitable. Pancrates emulates (ζηλοῦν) the *tropoi* of Pindar and Simonides rather than imitates them.

in the field of music is simply habituation (ἐθισμός), so long as there is not added to it a grasp of the reasons why each of the items that are taught is an essential part of what the student must learn” (32 1142e). In other words, practical training in classical music must be enriched by metamusical information (or, rather, “metapaideutic” information) in order to provide it with firm grounding in ethical judgment, the consistent ability to make the right choices and ultimately to resist the stylistic seductions that enticed the hapless Telesias, who was well habituated, but fatally uninformed.

Aristoxenus seems to be aware that his prescriptions are innovative. In the past, he says, students simply learned “in an unsystematic manner” (εἰκῇ) whatever was pleasing to teacher or student; “training and learning has never been supplemented with a τρόπων ἐξαρίθμησης (‘full enumeration of *tropoi*’).” Barker writes of this passage, “*Tropos* can hardly be a vague term, ‘style,’ here, in view of the recommendation that the *tropoi* be thoroughly enumerated,” and suggests that we take it to mean “technically specifiable melodic genre.”⁴³ But *tropos* was used to mean “style” in chapter 31 of the *De musica*, and I think it makes good sense to take it in its broader, non-technical sense here, especially when we consider the particular hazards of the fourth-century musical scene that Aristoxenus has in view. As I understand it, what Aristoxenus is advising is that the student be exposed to an ἐξαρίθμησης, a full systematic and critical overview, of the contemporary *styles* in circulation. This would complement his earlier prescription at 32 1142d that students should familiarize themselves with music composed in each genus, including the chromatic, which that good example Pancrates, recall, had known but mostly avoided in his professional career as a composer. The archaic *tropos* will, of course, be the one to practice, and the others will be rejected, but students should be made to understand why the classical style is superior, and why the other styles are inferior. This holistic approach to training and learning will paradoxically (yet not illogically) yield a more disciplined self-limitation in professional practice, just as the societies of Sparta, Pellene, and Mantinea maintain their strong

⁴³ Barker (1984) 239 n. 213. On the use of the verb ἐξαριθμεῖν, “to enumerate fully,” in the *Elementa harmonica* to denote a comprehensive, systematic account of musical structures, see Barker (2007) 52, although in the *Elementa harmonica* the activity of enumeration is theoretical and analytical rather than didactic.

musical conservatism because they have systematically reviewed the options and committed themselves to “just one or a very few *tropoi*” (*De musica* 32 1142e). In terms of the ethical framework articulated by Aristoxenus in chapters 18–21, only in this way can the classical composer in training form a true *prohairesis*. For, as Aristoxenus repeatedly reminds us, ἄγνοια, “ignorance,” of musical possibilities is incompatible with the prohairesetic state. To surmount the challenges of the polytropic musical culture, the archaically oriented musician must have been the beneficiary of a critically polytropic education.

6

Apollonius on Theophrastus on Aristoxenus

William W. Fortenbaugh

1. Introduction

When Carl Huffman contacted me concerning the possibility of hosting one of Project Theophrastus' biennial conferences at DePauw University on the life and work of Aristoxenus of Tarentum, I was quite pleased. For Project Theophrastus had begun to focus on Theophrastus' colleagues and successors in the early Peripatos but had no plans for holding a conference on Aristoxenus, whose importance for musical theory and the development of biography is well-known. A date for the conference was selected, and in the course of preparing for the conference, I came upon a text that was familiar to me from previous work on Theophrastus but which awakened my interest anew. For I saw that it not only brought together Aristoxenus and Theophrastus but also reminded me how important a knowledge of the sources is when working on an author whose writings survive only in reports by later authors. The text is fragment 6 in Fritz Wehrli's collection of sources for Aristoxenus¹ and no. 726A FHS&G in the recent collection

¹ Wehrli (1967) 9–10.

of Theophrastean sources.² In what follows, I want to take a close look at this text, beginning with the source author, Apollonius the paradoxographer (2nd cent. BCE).³ He cites Theophrastus as his source and reports a remarkable, though garbled account of Aristoxenus using music to restore emotional stability.⁴

2. Apollonius as Source

The Apollonius under consideration is the author of a short work entitled Ἰστορίαι θαυμασίαι, *Amazing Stories*.⁵ The work survives in a single manuscript, codex Palatinus Graecus 398 (10th cent.), and contains fifty-one entries, each presenting something deemed θαυμαστόν. A few entries lack specific attribution, but most are attributed to a particular author. Thirty entries are explicitly referred to Peripatetics: fifteen to Aristotle,⁶ two to Aristoxenus⁷ and thirteen to Theophrastus.⁸

At the very beginning of the work as it has come down to us, we read: Βόλου, a proper name in the genitive case, “Of Bolas.” After that comes a sentence, which begins: Ἐπιμενίδης Κρής λέγεται ..., “Epimenides the Cretan is said” The text is corrupt. Apparently something has fallen out before the reference to Epimenides, leaving

² FHS&G (1992; repr. with corrections 1993) 2:580–1.

³ On Apollonius’ date, see, e.g., Kroll (1924) col. 46. It seems impossible to identify convincingly this Apollonius with one of the several other Apollonii. See Giannini (1964) 122 n. 142.

⁴ Entry 49 in Giannini (1966) 140–2.

⁵ In translating the title Ἰστορίαι θαυμασίαι with *Amazing Stories* I am following the recent collection of sources for the lost works of Theophrastus (FHS&G [1993] 2:581). I do not want to ignore the fact that ἱστορία is often used of research as in the Theophrastean title Περί φυτῶν ἱστορία, *Research on Plants*, and in such cases translating ἱστορία with “reports” (suggesting research reports) may be preferable to “stories.” But in the case of Apollonius’ collection of *mirabilia*, the translation *Amazing Stories* seems entirely appropriate. To be sure, in gathering his material, Apollonius will have done some searching. But researching (as I use the word) would be overstatement or at least misleading. Moreover, some, if not most, of his reports were part of local lore (cf. μυθολογείται and φασί at the beginning of entry 3) and many are likely to have been ready at hand in earlier collections.

⁶ Entries 6–7, 9, 11, 21–2, 25–8, 35, 37, 39, 44, 51. I am not counting entries that are drawn from Aristotle but not explicitly attributed to him.

⁷ Entries 30 and 40. Entry 49 speaks of Aristoxenus = fr. 6 Wehrli, but it is attributed to Theophrastus = 726A FHS&G.

⁸ Entries 16, 29, 31–4, 41, 43, 46–50.

behind only the proper name Βόλου.⁹ In the context of a work entitled *Amazing Stories*, it seems certain that the person referred to is Bolus of Mendes (Egypt). He was a contemporary of Callimachus, and like Apollonius he had an interest in paradoxographical material. That Apollonius paid attention to Bolus' work and even drew upon it is quite likely. One possibility is that Bolus is Apollonius' source for the first six entries, which are special in that the focus is on individuals who work wonders, θαυματουργοί.¹⁰ That may be correct, but it is also possible that Bolus was named in connection with material that preceded what is now the first entry, i.e., the entry that begins "Epimenides the Cretan is said."¹¹

In regard to the relationship between Bolus and Apollonius, a passage in Stephanus of Byzantium should not be ignored. I am thinking of what we read in the *Ethnica*, s.v. ἀψίνθιον (wormwood).¹² There Stephanus attributes to Bolus a report concerning Theophrastus that is found in Apollonius without variation (*Amazing Stories* 31). The passage in question is *Research on Plants* 9.17.4. Theophrastus is focused on habituation, ἔθος; he asserts its importance for ingestion and refers to sheep. He first mentions sheep that do not eat ἀψίνθιον, wormwood, and then tells us that "those in the Pontus eat (wormwood) and become fatter and better looking and, as some say, have no bile." In both Apollonius and Bolus (as reported by Stephanus) this sentence is shortened by the omission of any reference to becoming fatter and better looking. Also omitted is the clause "as some say," so that we are left with the simple assertion that the sheep "have no bile." Given the two paradoxographers' interest in the amazing, shortening the sentence makes sense (get to the point as quickly as possible) and omitting the qualifier "as some say" removes an important expression of caution that might lessen the impact of what is being reported.

⁹ Almost certainly a separate/new entry (no. 1 in the edition of Giannini) begins with Ἐπιμενίδης. In what follows, Theopompus is twice cited as a source (lines 9 and 19).

¹⁰ The individuals are Epimenides, Aristeia, Hermotimus, Abaris, Pherecydes and Pythagoras. In his edition of the paradoxographers, Giannini (1966) 377 lists Apollonius' first six entries as *fragmenta dubia* under Bolus' name (F 2–7).

¹¹ Wellmann (1899) col. 677 endorses the view, while Ziegler (1949) col. 1153–4 rejects it. See Giannini (1964) 123–4 n. 144.

¹² Stephanus p. 153.10–12 Meineke = fr. 1 Giannini. The plant is *artemisia absinthium*.

But there is a down side to omitting the qualifying phrase. Without it someone might believe that Theophrastus was reporting his own view, perhaps based on autopsy. But that would be an error.

Here, then, we have a case in which both paradoxographers present an identical report that may mislead the reader who is interested in Theophrastus. Should we say that Apollonius has done nothing more than copy Bolus, his predecessor, who is the original culprit? And if we do, should we take a further step and say that all of Apollonius' reports concerning Theophrastus — including our special concern, entry 49 = fr. 6 Wehrli = fr. 726A FHS&G — are taken from Bolus? We might posit as a principle, "If one report, then all reports,"¹³ and proceed to eliminate Apollonius as an independent witness regarding Theophrastus. That is tempting, but since we have no second text of Bolus with which to test the application of the principle, I prefer to leave the matter undecided and to address a different question for which we have evidence: When Apollonius refers to what Theophrastus said in his botanical writings (that is twelve of the thirteen times that Theophrastus is named¹⁴), does Apollonius tend to render freely what Theophrastus actually says?¹⁵ The answer is yes: Apollonius varies the diction, rearranges the material and adds and subtracts. But we should also recognize degrees of departure from a given Theophrastean text, such that not all of Apollonius' entries involve (serious) misrepresentation. In support, I discuss two further texts from *Research on Plants*.

One text is found in *Research on Plants* 9.18.2. Theophrastus speaks of θηλύφονον, "woman-killer" (wolf's bane¹⁶), comments

¹³ For the principle, see Diggle (2004) 17 on the definitions that precede the character sketches of Theophrastus: "We cannot pick and choose (among the definitions). ... They stand and fall together."

¹⁴ On ten occasions, Apollonius not only names Theophrastus but also refers to his Περί φυτῶν, i.e., *Research on Plants* (entries 16, 29, 31–3, 41, 43, 47–8, 50). On one occasion, he names Theophrastus and cites Φυτικάι αἰτίαι, *Plant Explanations* (46). And on still another occasion, he refers to Theophrastus ("the same philosopher says") without citing a particular work (34). It is clear that he is drawing on *Research on Plants*.

¹⁵ In what follows, I shall not hesitate to speak of Apollonius making changes through abbreviation, omission, etc. I shall do so for simplicity's sake. Nothing follows concerning the possibility of an intermediate source from which Apollonius has taken over changes to the original Theophrastean text.

¹⁶ I.e., the poisonous plant *aconitum anthora*.

that some people call this plant σκorpion, “scorpion,” because it has a root like a scorpion, and goes on to say that it kills a scorpion if it is shredded over the animal. In entry 41 Apollonius reverses the names of the plant. He introduces the plant as “scorpion” and comments that some people call the plant “woman-killer.” He drops the explanation concerning what some people say (it does not suit the name “woman-killer”) and adds “plant” to the initial mention of scorpion to make clear that he is not talking about the animal. In addition, he replaces “shredded over” with “placed upon” and replaces “kills” with “dries up straightway.”¹⁷ Apollonius may have thought the latter change an

¹⁷ Apollonius refers to book 8 of *Research on Plants*. That is an error and reason for caution when dealing with Apollonius’ reports. But in fairness to Apollonius, we should allow the possibility of scribal error or that Apollonius consulted a copy of *Research on Plants*, in which material was organized differently. In this regard, two entries may be mentioned. One is entry 47, in which Apollonius refers to *Research on Plants* for the statement that certain kinds of truffle become harder when there is continuous thunder. That may be a simple error, but it should be observed that the reference to thunder and harder truffles invites comparison with a text in Athenaeus, according to which Theophrastus reported that certain truffles are said to come to be when thunder is hard or harsh (*The Sophists at Dinner* 2.60 62b = 400A.6 FHS&G). Perhaps Apollonius is not wrong to name Theophrastus, but he confuses hard thunder with hard truffles and gets the Theophrastean work wrong. Of greater interest is entry 29, for the text on which the entry is based occurs twice in *Research on Plants* and within sections that exhibit variation: i.e., in 9.13.3 and 9.20.4. In the past, editors have tended to condemn the earlier passage as out of place (e.g., Wimmer [1866] 154 and Hort [1926] 2:282–3 printed 9.13.3 within square brackets), but now Amigues (1988–2006) 5:xliv and 173–6 argues that a reviser added the later passage along with other unedited notes in order that none of Theophrastus’ work on botany might be lost. (Neither passage is enclosed in square brackets.) I am impressed by Amigues’ argument, but leave the issue to others. For our purposes, it is sufficient to underline that the manuscript tradition is complicated, so that a divergence by Apollonius from our received text need not be a simple error. In addition, I call attention to the fact that in both sections, 9.13.3 and 9.20.4, the sentence that underlies Apollonius’ entry is the same: ἐὰν δὲ αἱ μήτραι προσπέσωσι, τῷ ὕδατι ἀποκλύζειν (understand καλύουσι or χρή), “If *prolapsus uteri* occurs, wash off with water.” Apollonius’ changes are typical: for the sake of comprehension he adds a reference to birthwort, expands the prepositional phrase, replaces an infinitive construction with an imperative, and adds a vague reference to time: ἐὰν αἱ μήτραι προσπέσωσι, ἀριστολογία ἐν ὕδατι βεβρεγμένη καταντλείσθωσαν πλείονας ἡμέρας, “If *prolapsus uteri* occurs, let (the prolapsed uterus) be bathed for several days with birthwort made wet in water.” In adding πλείονας ἡμέρας, Apollonius may intend to remove what he takes to be an unfortunate omission on the part of Theophrastus. See below, n. 55 on entry 29.

improvement (more remarkable and greater impact), but the former seems to gain nothing (“placed upon” is less interesting). All this seems harmless enough, though the initial reversal of “woman-killer” and “scorpion” introduces a difference in emphasis. In Theophrastus, “woman killer” enjoys pride of place and “scorpion” is secondary. Apollonius reverses that.

As a second text, I cite *Research on Plants* 9.17.2–3. Here (as in 9.17.4, see above) Theophrastus is interested in showing that habituation, makes a difference in regard to ingestion: ποιεῖ δέ τι δῆλον ὅτι πρὸς τῇ φύσει καὶ τὸ ἔθος, “In addition to the nature (natural constitution of a person) it is clear that habituation, too, does (contributes) something” (9.17.2). By way of illustration, Theophrastus refers to two like-named persons: Eudemus the drug vendor¹⁸ and Eudemus the Chian.¹⁹ The former is said to have wagered that he could ingest a harmful substance without suffering ill-effects. He ingested moderately and nevertheless was overcome. The latter is said to have drunk hellebore without experiencing any ill-effects. And on one occasion, we are told, he spoke of consuming twenty-two cups on the same day without being overcome. However,²⁰ he is said to have done this by means of an antidote containing pumice-stone that he took in the course of the day. What Apollonius does with this text does not inspire confidence. He makes the two persons called Eudemus into one: a person named Eunomus, who is a Chian and a drug vendor. In addition, Apollonius attributes both the wager (made by the first Eudemus) and the successful drinking of 22 cups (accomplished by the second Eudemus) to this combined figure. The wager is mentioned in connection with the consumption of 22 cups, which in Theophrastus are separate events.²¹ And the explanation in terms of pumice-stone is

¹⁸ He is mentioned in Aristophanes

¹⁹ I am reporting the reading of the codices. See below, n. 23.

²⁰ “However” here translates πλὴν, which is used to indicate that the following explanation is not what one might expect, i.e., habituation. Instead, we are told that Eudemus the Chian drank an antidote.

²¹ If I understand the Theophrastean text correctly, the second Eudemus is introduced first as someone who could drink hellebore without being purged, i.e., he contrasts with the first Eudemus who drank moderately and yet suffered ill-effects. In Apollonius the mention of more draughts, πλείονας πόσεις (not in Theophrastus), seems to reflect and intensify the contrast, even though the first Eudemus is not mentioned.

replaced by one based on habituation (50).²² Amigues thinks that the name “Eunomus” is preferable in regard to the second Eudemus and alters the Theophrastean text accordingly.²³ Perhaps she is correct, but that hardly explains collapsing two people into one, misplacing the wager and replacing pumice-stone with habituation. I shall return to this text below in sections 3 and 5.

Up to this point, I have been silent concerning the Apollonian text that especially interests me (entry 49). It is not a report of what Theophrastus says in one of his botanical writings.²⁴ Rather, Apollonius refers to the work *Περὶ ἐνθουσιασμῶν*, *On (Types of) Inspiration* (328 no. 9b FHS&G).²⁵ This work has been lost except for three fragments. One is a longer text that deals with music as a means of treating bodily and psychic ills (726A FHS&G). It is entry 49 in Apollonius’ collection. The other two are shorter parallel texts that are found in Athenaeus (726B) and Aulus Gellius (726C). In the collection of Theophrastean sources, all three texts have been printed in the section on “Music.” The longer text (A) has been referred to from the section on “Ethics,” for it exhibits a clear interest in changing unwanted behavior. To what extent *On (Types of) Inspiration* exhibited a strong interest in natural science, i.e., the physiology of enthusiasm cannot be determined. In Diogenes’ catalogue of Theophrastean writings, the work is reported to have been one book in length (5.43). That does not preclude multiple interests, but given the paucity of our evidence, we should hesitate before speaking of a full-blown account of inspiration/enthusiasm from many different angles.

Since the Theophrastean work has been lost, we cannot compare what Apollonius tells us in entry 49 with what Theophrastus actually

²² That is in line with what Theophrastus says early in 9.17.2 (quoted above) and later in 9.17.4, but it is not true to what Theophrastus says in 9.17.3.

²³ Amigues (1988–2006) 5:212 n. 6 says that Apollonius will have read Εὐνομος in the copy of *Research on Plants* that he used. Subsequently (and at an early date) the preceding mention of Eudemus caused Εὐνομος to be changed to Εὐδημος.

²⁴ Although entry 49 is not based on a botanical writing of Theophrastus, it is preceded by three selections (46–8) from the botanical writings: one from *Plant Explanations* and two from *Research on Plants*. It is followed by one (50) from *Research on Plants*.

²⁵ The addition of “Types of” in parentheses is meant to take account of the plural ἐνθουσιασμῶν. Another possible addition is “Cases of.” The difference need not be great, for a series of types might be elucidated by a string of particular examples or cases.

wrote. But if we keep in mind the kinds of change that Apollonius was prepared to make in other entries, then we may be able to avoid error or at least pinpoint places where caution is called for.

3. Apollonius 49.1–3 = Theophrastus 726A FHS&G = Aristoxenus fr. 6 Wehrli

Here are the first three sections of Apollonius 49: both the Greek text as printed in FHS&G and an English translation.²⁶

- 1 ἄξια δ' ἐστὶν ἐπιστάσεως [τὰ εἰρημένα] «ἄ» Θεόφραστος ἐν τῷ Περί ἐνθουσιασμῶν ἐξείπεν. φησὶ γὰρ ἐκείνος τὴν μουσικὴν πολλὰ τῶν ἐπὶ ψυχὴν καὶ τὸ σῶμα γιγνομένων παθῶν ἰατρεῦειν, καθάπερ λιποθυμίαν, φόβους καὶ τὰς ἐπὶ μακρὸν γιγνομένας τῆς διανοίας ἐκστάσεις. ἰάται γάρ, φησιν,
 - 2 ἢ καταύλησις καὶ ἰσχυιάδα καὶ ἐπιληψίαν, καθάπερ πρὸς Ἀριστόξενον τὸν μουσικὸν ἐλθόντα — χρῆσασθαι αὐτὸν † τοῦ μαντίου τοῦ τῆς Πασιφίλης δαμῶτι ἀδελφῆς † — λέγεται [τὸν μουσικὸν] καταστήναι τινα ἐξιστάμενον ἐν Θήβαις ὑπὸ τὴν τῆς σάλπιγγος φωνήν· ἐπὶ τοσοῦτον γὰρ ἐβόησεν ἀκούων, ὥστε ἀσχημονεῖν· εἰ δέ ποτε καὶ πολεμικὸν σαλπίζειέ τις, πολὺ
 - 3 χεῖρον πάσχειν μαινόμενον. τοῦτον οὖν κατὰ μικρὸν τῷ αὐλῷ προσάγειν, καὶ ὥς ἂν τις εἴποι ἐκ προσαγωγῆς ἐποίησεν καὶ τῆς σάλπιγγος φωνὴν ὑπομένειν.
- 1 The things that Theophrastus said in his *On (Types of) Inspiration* are worth attention. For he says that music cures many of the ills that affect the soul and the body, such as fainting, fright and pro-
 - 2 longed disturbances of mind. For the playing of the *aulos*, he says, cures both sciatica and epilepsy, just as it is said that someone who had been driven mad in Thebes by the sound of the *salpinx* went to Aristoxenus the musician — for he had consulted the oracle ... — and was restored. For he shouted so loudly when he heard it that he disgraced himself, and if anyone ever played a military tune,
 - 3 he suffered far more, being maddened. So (Aristoxenus) gradually introduced this man to the (sound of the) *aulos*, and, so to speak, as a result of (this) gradual introduction he made him able to endure even the sound of the *salpinx*.

²⁶ The translation is almost identical to that found in FHS&G. The only difference is that here σάλπιγξ has been transliterated; in FHS&G it was translated with “trumpet.”

In section 2, the epithet ὁ μουσικός, “the musician,” makes clear that the Aristoxenus referred to is the Peripatetic and contemporary of Theophrastus. According to Reinach,²⁷ the earliest use of ὁ μουσικός as an epithet for Aristoxenus is found here in Apollonius. It was present in the text of Theophrastus and taken over by Apollonius. That could be correct. An example of Theophrastus using a professional epithet to avoid confusing like-named persons has already been touched on above in section 2. I am thinking of *Research on Plants* 9.17.2–3, where a person named Eudemus is identified as ὁ φαρμακοπώλης. The alert reader is expected to understand that the Eudemus in question is the well-known drug vendor mentioned by Aristophanes in *Plutus* 884.²⁸ Nevertheless, we cannot rule out that the use of ὁ μουσικός as an epithet for Aristoxenus postdates Theophrastus and that its occurrence in 49 is an addition attributable to Apollonius. Indeed, we find the epithet applied to Aristoxenus in entry 40, where Apollonius refers to Aristoxenus’ *Life of Telestes*. There is no reason to think that this occurrence goes back to Theophrastus. Most likely it was added as an epithet by Apollonius or an earlier paradoxographer like Bolus. But whatever the correct explanation, the epithet stuck and became a badge of honor for Aristoxenus.

What follows in 49 is seriously corrupt; attempts to emend the text are problematic at best. In particular, Reinach wants to transpose the better part of two lines (from the beginning of sec. 2 to the end of that section) and to emend individual words.²⁹ The result has its appeal, but it also rules out an example of curing bodily ills, such as might be expected, given that καθάπερ, “just as,” follows the mention of sciatica and epilepsy (at the end of section 1 and the beginning of section 2).³⁰ Perhaps, then, the text is lacunose, and were it whole, we would see that καθάπερ introduces an example of curing bodily ills: someone who was suffering from a disorder like sciatica or epilepsy, went to Aristoxenus for treatment and presumably came away in better physical condition. After that a second example will have been

²⁷ Reinach (1902) 75–9.

²⁸ *Plutus* was produced in 388 BCE. See Amigues (1988–2006) 5:212 n. 5.

²⁹ On Reinach’s proposed transposition, see the critical apparatus to lines 10–1 in FHS&G. Note 1 to the translation gives the sense of the text as altered by Reinach.

³⁰ In saying that Reinach’s transposition rules out an example of curing bodily ills, I am focusing on 49.1–3, i.e., on Theophrastus 726A FHS&G and Aristoxenus fr. 6 Wehrli, both of which omit sections 4 and 5. See below, sec. 5.

offered: one that dealt with psychic disturbance. For that reason, the editors of FHS&G have not followed Giannini, who printed a Greek semi-colon after the mention of sciatica and epilepsy and before καθάπερ. Rather, the editors have printed a comma (cf. the earlier occurrence of καθάπερ in sec. 1).³¹ More problematic is the second occurrence of τὸν μουσικόν in section 2. Here the editors have followed Giannini and removed the words by placing them in square brackets. That may be a mistake. Conceivably the words belong to a second example.³² In the first, Aristoxenus is identified by means of his name plus “the musician.” In the second, he is referred to simply as “the musician,” who restored someone who had been driven mad in Thebes by the sound of the *salpinx*. That is, of course, speculation, but not wildly so. For toward the beginning of our text, we are told that Theophrastus spoke of music curing ills not only of the soul but also of the body (sec. 1). On the suggested understanding of the text, we are given examples of both.

According to Apollonius, Theophrastus said that music cures fainting,³³ and playing the flute cures sciatica and epilepsy (sec. 1).³⁴ If music does in fact cure physical maladies, that is wonderful news and quite appropriate to a work that reports *mirabilia*. Given our present day enthusiasm for “alternative medicine,” we may be not only

³¹ Giannini prints his section numbers within the text. Hence, we have not only a Greek semi-colon but also a Roman numeral separating ἰσχυιάδα καὶ ἐπιληψίαν from καθάπερ. That breaks the flow of the text, so that the reader may be less concerned that an example of physical disorder is not introduced by καθάπερ. In the collection of Theophrastean sources, a comma will be found before καθάπερ in both occurrences (726A.3, 5 FHS&G). That does not decide how the text should be understood/restored, but it does seem consistent and may at least encourage the reader to ask whether an example of physical disorder has fallen out.

³² Cf. Wehrli (1967) 48.

³³ Theophrastus wrote a work Περὶ λειποψυχίας, *On Fainting* (328 no. 2 FHS&G). The noun λειποψυχία is used as a synonym for λειποθυμία. Cf. the use of λειποθυμεῖν in 345.6 FHS&G, where it is a synonym for λειποψυχεῖν found elsewhere in the text (345.15, 20, 33). Whether Theophrastus wrote λειπ- or λπ- is problematic. LSJ gives only λπoθυμία and under λειπανδρία comments that metrical evidence favors λπ-. In 345, i.e., Photius' excerpts from Theophrastus' Περὶ λειποψυχίας, there is no mention of musical therapy.

³⁴ The verb φησιν(ν) occurs twice in sec. 1. There is no doubt that Theophrastus is the subject of the second occurrence as well as the first. The shift from ἰατρεῦεν (line 4) to ἰάσθαι (*re vera* ἰάται, line 5) is noticeable, but perhaps not to be pressed given the state of the text.

intrigued by what Apollonius reports but also inclined to believe that Theophrastus himself was convinced that playing the *aulos* or flute could cure bodily disorders. Indeed, we might cite Athenaeus, who tells us that in *On Inspiration*³⁵ Theophrastus recorded that music cures diseases. In particular, Theophrastus reported that “persons suffering from sciatica are permanently freed from the illness, ἀνόσους διατελεῖν, if someone played the *aulos* or flute over the (affected) area in the Phrygian harmony” (726B FHS&G). Nevertheless, we should not overlook Aulus Gellius. He tells us that he has recently consulted a work of Theophrastus, in which he found the following: “It is believed by many and has been put on record, that when the pains of sciatica are greatest, if a piper plays over them with gentle melodies, the pains are diminished” (726C). That is not evidence that Theophrastus actually believed in permanent cures accomplished by flutes and the like. On the contrary, we read of a lessening of pain, *minui dolores*, and more importantly, we are told that Theophrastus wrote, “It is believed by many,” *creditum hoc a plerisque esse*. Since Gellius’ claim to have read a Theophrastean work is not to be doubted,³⁶ I am inclined to follow Gulick and Anderson,³⁷ who hold that Theophrastus reported what many believe without making their belief his own.³⁸

³⁵ The titles *On Inspiration*, Περί ἐνθουσιασμοῦ (328 no. 9a FHS&G), and *On (Types of) Inspiration*, Περί ἐνθουσιασμών (328 no. 9b [see above, n. 25]), do not refer to two separate works. We may compare, e.g., *On Sweat*, Περί ἰδρώτος, and Περί ἰδρώτων, *On (Types) of Sweat*. Both titles are found in the manuscripts of Diogenes’ catalogue of Theophrastean writings. On the issue, see my remarks (2003) 53–5.

³⁶ It is, I think, certain that the material presented by Gellius in *Attic Nights* is based sometimes on his own reading and other times on an intermediary. And that may apply to reports concerning Theophrastus. When Gellius tells us what Theophrastus said concerning partridges in Paphlagonia and dolphins at Naupactus, he may be drawing on intermediaries. But when Gellius quotes in Greek from Theophrastus’ work *On Friendship* and when he reports in Latin what Theophrastus said in that work, there is no reason to believe that Gellius is working with an intermediary. And that holds true of Gellius’ report concerning the diminished pains of sciatica. Indeed, when Gellius writes *ego nuperrime in libro Theophrasti scriptum inveni*, “I very recently found this written in a book of Theophrastus,” he is alerting the reader that his report is based on a fresh reading of his own. He is neither drawing on old notes made years before in Athens nor working with some unidentified intermediary. See my commentary on Theophrastus’ ethics (2011) 45–9.

³⁷ Gulick (1937) 364 n. a and Anderson (1980) 94.

³⁸ Confronted with a passage in which Theophrastus reports what others say, an excerptor may be tempted to omit single words or phrases that make clear whose

The preceding paragraph has been concerned with ills of the body. I turn now to those of the soul: in particular, fear and derangement. We are provided with an illustration: the man in Thebes who was driven out of his mind by the sound of the *salpinx*, a kind of trumpet that was used in war to give signals.³⁹ Whenever the Theban heard the *salpinx*, he shouted loudly and disgraced himself. And if someone sounded the *salpinx* in military mode, εἰ ... πολεμικὸν σαλπίσειέ τις, he suffered much more, πολὺ χεῖρον (sec. 2), becoming mad. He was cured by Aristoxenus, who introduced him little by little to the sound of the *aulos* and in this way made him able to endure even/also the sound of the *salpinx*, καὶ τῆς σάλπιγγος φωνὴν ὑπομένειν (sec. 3). The use of καί here may be emphatic. In the collection of Theophrastean sources, καί has been translated with “even” (p. 581 FHS&G). That underlines what might be thought astonishing: repeated exposure to the sound of one instrument, the *aulos*, was able to change the way the Theban reacted to the sound of a different instrument, the *salpinx*.⁴⁰ But is such a change truly astonishing? Aristotle (*Politics* 8.7 1342b1–3) compares the *aulos* with the Phrygian mode: both are said to be exciting and emotional, ὀργιαστικὰ καὶ παθητικὰ. Being a wind instrument like the *salpinx* and being able to affect the listener with considerable impact, it might be thought to have a kind of homoeopathic effect that extends to the sound of the *salpinx*.⁴¹ And if that is correct, then a less emphatic translation of καί, “also,” might be preferable.

view is being reported. For an example, see above, sect. 2 on Apollonius 31 and the omission of “as some say.”

³⁹ On the *salpinx* as a war trumpet, see LSJ s.v. I together with ps.-Aristotle, *On the Universe* 6 399b1–10.

⁴⁰ Anderson (1980) 87 says that Apollonius’ story is “in one respect unusual: it combines a musical instrument with a non-musical one and even seems to postulate a link between their affective natures. The *salpinx* was a military signaling device, a battle-trumpet supposedly invented by the war-goddess Athena. The Greeks never considered it a musical instrument.”

⁴¹ According to Wehrli (1967) 48, the title of the Theophrastean work, i.e., *On (Types of) Inspiration* makes clear that the change in the Theban is effected by the enthusiastic character of the music. Wehrli also cites book 7 of Plato’s *Laws*. At the beginning of this book, the Athenian Stranger is made to emphasize the importance of movement for the proper development of young bodies and souls. He first appeals to experience, pointing out that wakeful children are made to fall asleep through motion and music: their mothers move them about and sing to them as if piping them down, καταυλοῦσι. In much the same way, persons in a Bacchic frenzy are cured through

The preceding interpretation has a certain appeal, but it stands on wobbly legs. Our Apollonius text does not characterize the sound of the *aulos* as exciting and emotional (we are told only that Aristoxenus introduced the Theban to the *aulos*, τῷ αὐλῷ προσάγειν) and we would be making a mistake to think that the *aulos* was always used to excite the listener. It can be used to calm a person down (see below, sect. 4) and more importantly it is connected with an orderly approach to war. I am thinking of Polybius, *Histories*, in which we read that in war the ancient Cretans and Spartans replaced the *salpinx* with the *aulos* and rhythmic movement. And in Arcadia the young men practiced military parades with the *aulos* and orderly movement (4.20).⁴² Similarly, Plutarch in the *Life of Lycurgus* tells us that when the Spartan king led his army into battle, the *auletes* played a hymn to Castor, and the soldiers marched rhythmically in time to the *aulos* without confusion or fear or rage in their souls (22.2–3). Should we think, then, of Aristoxenus introducing the Theban to orderly rhythms played on the *aulos*? The Theban understands that the rhythms are associated with war, but they produce composure and confidence, so that in time the Theban is no longer terrified when he hears the sound of the *salpinx*.⁴³ I find this second interpretation preferable, but in the

dance and song. Both conditions are associated with fear and both are said to be caused by a bad state of soul, which is removed by imposing an external motion that overcomes the fearful and manic motions within (790c5–791b2). A relation to Apollonius 49 is clear. Both texts mention fear (790e8–791a2; 49 sec. 2), and both speak of playing the *aulos* (the use of καταυλούειν in 790e2 invites comparison with κατεύλησις in 49 sec. 2). But there is a difference. In the case of wakeful children (790d5–6) and persons suffering from a Corybantic or Bacchic frenzy (790d4 and 790e2–3) the relief appears to be temporary. In contrast, the Theban treated by Aristoxenus seems to have received more than temporary relief: henceforth, he will be able to endure the sound of the *salpinx*, τῆς σάλπιγγος φωνὴν ὑπομένειν (sec. 3). But I would be more confident in this understanding, were some word like διατελεῖν added to the text (cf. 726B.2 FHS&G cited above).

⁴² This passage is also discussed by Eleonora Rocconi in her contribution to this volume.

⁴³ The phrase κατὰ μικρόν, “little by little” or “gradually” is important, because it makes clear that we are dealing with a process that builds on itself, i.e., a process of habituation that gradually changes the character of the Theban. In other words, we are not to think of catharsis as it is presented in Aristotle’s *Poetics* 6. For there catharsis is a purgation that is accomplished during a single performance and that needs repeating (frequently, if one is naturally emotional).

absence of further information concerning the music that Aristoxenus played on the *aulos*, an unqualified assertion would be hasty.

Up to this point I have been focused on the *salpinx qua* war trumpet and have assumed that the Theban experiences fright whenever he hears the sound of the *salpinx*. That is, I think, correct, but it should be acknowledged that the use of the *salpinx* is not confined to war. I cite ps.-Aristotle who tells us that when men revel, ὅταν γομᾶζωσιν, they make use of the *salpinx*, relaxing their breath in order to make a softer sound (*On Things Heard* 803a25–7).⁴⁴ This use outside of war explains, I think, the Theban's different reactions to the sound of the *salpinx*. When he heard it being played softly outside a military context, he shouted and disgraced himself, but when he heard the *salpinx* giving a military signal he went mad. In the second case,⁴⁵ the Theban's reaction is clearly based on belief. As part of his early training or simply through experience, the Theban recognizes that the signal being sounded is one of war. Reasonably or unreasonably he believes himself in danger and is quite overcome with fear. The first case is stated succinctly. We are told only that the Theban disgraced himself by shouting when he heard the sound of the *salpinx*. We might suppose that the Theban heard the *salpinx* making a softer sound, which he nevertheless found unpleasant, even painful, and therefore difficult to tolerate. Such a response could be understood as a purely physiological reaction to painful sensation. But that seems to me an unlikely stretch. More probably, the Theban has come to associate the *salpinx* with war, so that whenever he hears it he experiences fright and disgraces himself. But when the sound is one of war, a military signal, his response is intensified to the point of madness.

In treating the Theban, Aristoxenus does not intend to mislead him into believing that the *salpinx* never signals danger. It does signal danger, and it is important to know when it does and to respond in a proper, orderly manner. What Aristoxenus intends — on the second interpretation — is to reduce the Theban's fear of war. And that is accomplished by introducing the Theban to the *aulos* in much the way that Polybius describes. As a result, the Theban acquires orderliness and confidence. He can tolerate the sound of the *salpinx* not only when

⁴⁴ I thank Andrew Barker, who called my attention to this passage.

⁴⁵ That there are different reactions in different contexts is emphasized by the way in which the second case is introduced: εἰ δέ ποτε καί (line 10).

it is played softly but also when it blasts the sound of war. But there may be more. The use of the *aulos*, albeit a pipe, need not exclude words as part of the Theban's training. I cite Polybius, who refers to young men singing to the accompaniment of *auletes* (4.20.9). Aristoxenus may have introduced something similar: i.e., he may have added words that celebrate courage and the nobility of death in battle. And none of that rules out using the *aulos* to play music that is exciting and emotional. That use might be infrequent, but it might provide a way of testing and strengthening the character of the Theban. But I am speculating.

4. Two Not So Closely Related Texts

For the sake of clarity, it may be helpful to compare two anecdotes. One concerns Pythagoras and a Tauromenian youth who had been partying heavily at night. The youth was greatly stimulated not only by wine but also by the Phrygian melody that an *aulete* was playing. He wanted to set fire to the door of a rival in love, but he was stopped by Pythagoras who had the *aulete* change the melody to a spondaic one that had a calming effect, so that the youth went home in an orderly manner (Iamblichus, *Life of Pythagoras* 25.112).⁴⁶ Here again we have music working a cure, and as with the Theban the cure is effected by playing the *aulos*. But there is a significant difference. In the case of the Tauromenian youth, what is cured is an episode of drunken rage directed against a rival and not an unwanted disposition, as was true of the Theban. At least there is no mention of a long-term cure and we should not imagine one. The next day, after more wine and more exciting music, the youth might succeed in torching the door of his rival. The case of the Theban is different in that his cure is conducted by Aristoxenus over a period of time, and on my reading it ends in changed capacity: henceforth, the Theban is able to endure the sound of the *salpinx*. That does not mean that Aristoxenus was only interested in music effecting permanent cures. Indeed, a passage in pseudo-Plutarch, *On Music* 43 (1146e–1147a = fr. 122 Wehrli) tells us that according to Aristoxenus when a person becomes intoxicated, orderly and harmonious music has a calming effect so that the drunken person

⁴⁶ The passage is also discussed by Antonella Provenza in her contribution to this volume.

is restored to his former condition.⁴⁷ That says nothing about tomorrow and the possibility of immunizing a person against intoxication at a later date.

A second text is in certain details more closely related to the story of the Theban. It too is found in *Amazing Stories* — it is entry 40 — and once again Apollonius refers to Aristoxenus (fr. 117 W). But this time Aristoxenus is not a figure in an anecdote. Rather, he is cited for what he says in his *Life of Telestes* about women in Locri and Rhegium. They are said to have become quite excitable, so that at dinner when they heard someone calling, they jumped up, and becoming frantic they ran outside the city. When the people of Locri and Rhegium consulted the oracle concerning release from this affliction, they were told to sing vernal paeans for sixty days, after which writers of paeans became numerous in Italy. Connections with the story of the Theban are clear: there is an unwanted disposition that manifests itself in frantic behavior,⁴⁸ an oracle is consulted, the recommended remedy

⁴⁷ Or as we read in ps.-Plutarch, “to the opposite condition,” εἰς τὴν ἐναντίαν κατάστασιν (1147a). In his comment on this text Wehrli (1967) 85 speaks of education through music, *Erziehung durch Musik*, and the educational character of music, *ihr παιδευτικός τρόπος*. If I understand the German correctly, that may be misleading. At least, I would prefer to restrict “education” to training that results in a well-established, long-term disposition. In the musical treatment of drunkenness focused on by Aristoxenus in fr. 122 Wehrli, such a result is not under consideration.

⁴⁸ Giannini (1966) 137 translates the words πάθη, ὧν ἓν εἶναι καὶ τὸ περὶ τὰς γυναῖκας γενόμενον ἄτοπον with *prodigia, quorum unum esse illud mulieribus singulare*. Later he translates the phrase περὶ τῆς ἀπαλλαγῆς τοῦ πάθους with *de procurando prodigio* (40 sec. 1). I am uneasy with these translations; in particular, the word *prodigium* as a translation for πάθος may not be the best choice. To be sure, *prodigium* may refer to something monstrous and unnatural, and that is suggested by ἄτοπον. But in entry 40, one might better translate with some Latin equivalent of “affliction” or “unwanted disposition.” We should compare the use of πάθος in entry 49 sec. 1, where the plural refers to ills that affect the soul and body. And in both entries, 40 and 49, πάθος can be understood inclusively, so that it refers to both an unwanted disposition and its manifestations. The excitability of the women in 40 and the sciatica in 49 are conditions that are episodic. The episodes come and go, but if the condition is removed, then the episodes do not recur. (Caveat: an unwanted disposition to respond emotionally can be removed without necessarily removing the possibility of individual episodes. To make the point, I cite a humorous example: namely the people of Tiryns, whose proneness to excessive laughter rendered them dysfunctional. In Athenaeus, *The Sophists at Dinner* 6.79 261d-e, we are told that they wished to be free of this condition, πάθος. They wanted to be free of a long-standing disposition, a πολυχρόνιον ἦθος, but they did not want to lose altogether the feeling

is musical and requires time, in order that a cure be achieved. The differences are, however, equally clear. In entry 40, there is no mention of a musical instrument. The oracle recommends singing vernal paeans, which rules out the *aulos qua* pipe, unless one imagines two parties: singers and pipers.⁴⁹ Moreover, the singing will not be simple humming. There will be words, so that the content of the paeans will have a remedial effect alongside the paeonic melody. In section 3, I did suggest that Aristoxenus could have added words to the treatment of the Theban. But that was speculation that had no basis in the text.

Before moving on, I want to call attention to the last sentence of entry 40: "From this there arose many persons who composed paeans in Italy." The sentence may be Aristoxenus' way of indicating that the story of the frenzied women is in origin aetiological, but it is not impossible that the mention of paeans sung over sixty days prompted Apollonius to add a final sentence concerning numerous writers of paeans in Italy. That Apollonius was capable of adding material on his own is quite clear (see sec. 5), but I do not push the issue in regard to entry 40.

5. The Final Sections of Apollonius 49

In what precedes, I have ignored the fact that entry 49 does not stop with the story of the overly excitable Theban (sec. 2–3). It continues for two more sections (4–5). These final sections are omitted in the standard collections of fragments (Theophrastus fr. 726A FHS&G⁵⁰ and Aristoxenus fr. 6 Wehrli). There is good reason to omit the last section. It runs as follows: τὸ δὲ γιγνόμενον διὰ τῆς καταυλήσεως ἐπχωριάζει καὶ ἀλλαγῇ, μάλιστα δὲ ἐν Θήβαις μέχρι τῶν νῦν χρόνων, "[cures] occurring through the playing of the *aulos* are customary elsewhere and especially in Thebes up to the present time" (5). The reference to Thebes harkens back to the earlier reference to Aristoxenus and the cure that he is said to have effected in Thebes (sec. 2–3). The reference to the present time tells us that the kind of cure accomplished by Aristoxenus was still being practiced in Thebes. Since Theophrastus was a contemporary of Aristoxenus and since the

or emotion of laughter. They failed to achieve their goal, but their intention was not absurd. [The text is Theoph. fr. 709.]

⁴⁹ We can imagine that the paeans are accompanied by the lyre, but that is not made explicit.

⁵⁰ The sections are also omitted by Wimmer (1866) fr. 88.

phrase “up to the present time” implies that more than a few years have passed, it seems reasonable to say that the final section is not Theophrastean. It is probably an addition by Apollonius, who belongs to the second century BCE, and therefore will have been writing a full hundred years or more after Theophrastus.

That Apollonius did add material to excerpts from earlier authors is clear. To make the point, I cite two further entries that are said to be Theophrastean. One is found shortly before entry 49: it is no. 46. Apollonius announces that he is drawing on book 5 of *Plant Explanations* and proceeds to report that bean pods, when scattered on the roots of trees, dry out what is growing. With only minor variation in wording, the report is a fair rendering of what Theophrastus says at the end of *Plant Explanations* 5.15.1. What follows is another matter. Apollonius says that birds that eat these bean pods become sterile, and that the Pythagoreans prohibit the use of beans because they cause gas, impede digestion and produce turbulent dreams. That seems to be an exercise in free association. It is certainly not present in *Plant Explanations* 5.15.1.

The second excerpt, already referred to in section 2, comes immediately after entry 49: it is no. 50. Apollonius begins by referring to the end of the work *On Plants*, i.e., to book 9 of *Research on Plants*. After that comes a garbled account of a Chian who was able to drink a large quantity of hellebore without being purged. Whereas Theophrastus distinguishes between a drug vendor who was overcome by a single draft and a Chian who drank many cups, Apollonius has only a Chian drug vendor. That should give us pause regarding Apollonius as a source for Theophrastus, but what especially interests me is that once again Apollonius adds material that is not in Theophrastus. Whereas Theophrastus reports that the Chian was able to drink much without being purged because he took an antidote of vinegar and pumice stone, Apollonius speaks of developing toleration by beginning with a few drinks and proceeding to a larger number. Perhaps Apollonius simply stopped reading and on his own added an explanation involving habituation. Or he had a lacunose text of *Research on Plants* and felt the need to add an explanation. Or he drew on an intermediary (someone like Bolus) who had already introduced the explanation in terms of habituation.⁵¹ But whatever the correct explanation, excerpts 46 and 50 give us reason to question the ending of Apollonius' excerpts.

⁵¹ Apollonius' interest in explanation varies. He cites the pseudo-Aristotelian

That includes not only the last section of 49 but also the next to last section. It runs: θεραπεύει δὲ ἢ καταύλησις καὶ ἐάν τι μέρος τοῦ σώματος ἐν ἀλγήματι ὑπάρχῃ· καταυλουμένου τοῦ σώματος καταύλησις γιγνέσθω ἡμέρας εἴ ὡς ἐλάχιστα, καὶ εὐθέως τῇ πρώτῃ ἡμέρᾳ ἐλάττων ὁ πόνος γενήσεται καὶ τῇ δευτέρᾳ, “Playing the *aulos* also provides therapy if some part of the body is in pain. When the body is being treated with the playing of the *aulos*, let the playing occur for at least five days, and immediately on the first day the pain will be less and on the second (still less)” (4). Much as the last section takes us back to what has already been said (Thebes is mentioned in sec. 2 and repeated in sec. 5), so the penultimate section seems to recall earlier material: the mention of “some part of the body being in pain” picks up not only the reference to ills of the body but also and especially the reference to sciatica, which is a localized condition (sec. 2). If there was an earlier example of treating bodily pain that has fallen out of the text (see above, §3), then the penultimate section might be drawing on that example while adding a detail like continuing treatment for five days.⁵² And if there was no earlier example, then the penultimate section may have been added by Apollonius

Problems on six occasions. On three of the occasions (entries 7, 22, 37) the relevant passage in the *Problems* can be identified, and on three other occasions (9, 21, 51) that is not the case. When we can identify the passage in the *Problems*, we find an explanation given (as is usual in the *Problems*). But Apollonius’ reports vary. In one entry (7) he omits any reference to an explanation, in two others (22 and 37) he tells us that Aristotle gave the explanation but does not say what it is. In the entries that cannot be referred to a specific passage in the *Problems*, we find similar variation. Once (9) Apollonius gives no explanation, on another occasion (21) he offers “nature does nothing in vain,” and on a third occasion (51) he tells us that Aristotle tries to give the answer. At first I expected that an author interested in the amazing would suppress any reference to explanations (they reduce astonishment), but clearly Apollonius does not do that.

⁵² The use of the imperative γιγνέσθω, “let (the playing) occur” suggests a practical directive to someone who might want to attempt a cure using the *aulos*. That might be evidence of a later addition, but there is no reason why Theophrastus could not have expressed himself in this manner. Or Apollonius could have altered a Theophrastean report in declarative sentences by introducing an imperative, hoping thereby to engage the reader. Cf. *Amazing Stories* 29, in which Apollonius has changed the grammatical construction by introducing an imperative. See above, sec. 2 n. 17. Whatever the truth concerning the imperative construction, the phrase καταύλησις γιγνέσθω following immediately upon the words καταυλουμένου τοῦ σώματος strikes me as ugly prose and a sign of abbreviation.

to supply an example, though neither sciatica nor any other bodily ill is referred to by name. Some support for this interpretation might be seen in the use of *καί* in the opening sentence. There we read that playing the *aulos* “also” provides therapy if some part of the body is in pain. That might suggest that the topic was not covered (or not covered adequately) in what precedes. Perhaps then the section in question is an addition by Apollonius, intended to add what is missing above. But that need not be the case. It may be that Theophrastus, after mentioning sciatica and epilepsy (sec. 2), put off discussion of these afflictions and turned immediately to mental derangement. Only later did he return to bodily afflictions offering what is reported in the penultimate section of Apollonius’ text. That possibility finds some support in Athenaeus (726B FHS&G) and Aulus Gellius (726C). Athenaeus explicitly refers to Theophrastus’ work *On Inspiration* and speaks of someone playing the *aulos* over the place, *εἰ καταυλήσοι τις τοῦ τόπου*. That seems to echo *καταυλούμενου τοῦ σώματος* (“when the body is treated with the playing of the *aulos*”) in Apollonius. And Gellius refers to a book of Theophrastus and speaks of pains being diminished, *minui dolores*. That seems to echo *ἐλάττων ὁ πόνος γενήσεται* (“the pain will be less”) in Apollonius.⁵³ I have already said that Gellius’ testimony is to be taken seriously, and Athenaeus may be drawing on a good source.⁵⁴ Hence, I think we must allow the possibility that section 4 of Apollonius does report Theophrastean material albeit in abbreviated form: e.g., a reference to sciatica has been omitted.⁵⁵

⁵³ It also goes well with the use of *θεραπεύειν* at the beginning of the penultimate section. The verb and cognate noun *θεραπεία* are used widely of caring and treating humans, animals and plants, without necessarily effecting a cure. For a striking example, see the Hippocratic *Aphorisms* 6.38, where we are told that it is better not to give treatment, *θεραπεύειν*, in the case of hidden cancer, for patients who receive treatment die quickly.

⁵⁴ There is, however, a problem reconciling Gellius and Athenaeus. While the former speaks of playing gentle melodies over the painful area, the latter speaks of the Phrygian harmony, which Aristotle describes as exciting and emotional. We have already seen that the sound of the *aulos* can be calming as well as exciting. But that was with reference to a drunken youth who was enraged by a rival in love (see above, sec. 4). That is very different from the localized pains of sciatica. At one time I was tempted to think that Gellius and Athenaeus are not referring to the same Theophrastean work, or if they are, then to different passages within the work. Perhaps someone more familiar with the *aulos* can remove what may be only an apparent difficulty.

⁵⁵ The specific reference to five days, *ἡμέρας ἑ* (sec. 4), might be significant. In

6. Section 1 as a Separate Report ?

Up to this point I have resisted suggesting that sections 2 and 3 as well as 4 and 5 might not be Theophrastean; i.e., with the words καθάπερ πρὸς Ἀριστόξενον τὸν μουσικὸν ἐλθόντα, “just as (someone) going to Aristoxenus the musician” (*ineunte* sec. 2), Apollonius begins to draw on a different source,⁵⁶ perhaps Bolus and in any case someone later than Theophrastus. That author will have described Aristoxenus as “the musician” and gone on to relate the anecdote concerning the Theban. Moreover, the textual disturbance in section 2 may be more severe than is normally imagined. Were the text intact, we would see that the Theophrastean material stops at the end of the first section and that what follows was once a separate report drawn from a different source. Many of Apollonius’ reports are quite short, so that the brevity of section 1 does not tell against seeing section 1 as the whole of what Apollonius has taken from Theophrastus. After that he changes sources and reports an anecdote concerning Aristoxenus. All that seems to me possible, but the mention of ills affecting soul and body in section 1 fits well with what follows in sections 2–4, and the mention of fear and derangement in section 1 seems to introduce the story of the Theban in sections 2–3. Such considerations suggest not separating section 1 from what follows.

I despair of any firm conclusion and recommend printing all of *Amazing Stories* 49 (all five sections) in any future edition of the Theophrastean volumes and in Carl Huffman’s forthcoming edition of Aristoxenus. That would make it easier for the interested reader to assess the evidence and to make up his own mind.

Amazing Stories 29, Apollonius also focuses on therapy and adds a reference to time which is missing in Theophrastus (see above, n. 17). The reference is vague: let the uterus be bathed for several days, πλείονας ἡμέρας. In contrast, the reference to five days is quite specific, perhaps because it was present in Theophrastus (i.e., in the work *On Inspiration* [328 no. 9a-b FHS&G], which is lost and therefore cannot be checked). Alternatively five days may have been a widely accepted period of time, which Apollonius added on his own. I leave the issue undecided.

⁵⁶ See Barker (2005) 136.

Aristoxenus' Biographical Method*

Stefan Schorn

1. Introduction

The negative assessment of Aristoxenus' biographies in modern scholarship is highly influenced by the verdict pronounced by Friedrich Leo more than a hundred years ago:¹

What we learn about the topics and the contents of these βίαι shows in a surprising way the fundamental features of this whole kind of literature in later times: the life of a person is treated who lived hundreds of years ago and about whom there was no documentary tradition; legendary traditions and deductions based on it are accepted;

* This paper has profited a great deal from the discussions with the participants in the Aristoxenus conference at DePauw University and especially from the remarks sent to me by Carl Huffman after my lecture. Although we agree in many, and I would say, the most important aspects of the interpretation of Aristoxenus' *Life of Socrates*, there are nevertheless quite a few things upon which we disagree. I have not considered it necessary to enter into a discussion with his views in the text or in the footnotes. The readers will be easily able to assess our arguments themselves.

¹ Leo (1901) 102–3.

characteristic traits are invented and especially malicious gossip is propagated, exaggerated and invented as a consequence of a hostile attitude (about Socrates and Plato), and here we even find already the tendency to besmirch the relationship between teacher and pupil (fr. 25)² and to denigrate the social position of the father (fr. 41), which is found regularly in the later tradition. Oral traditions of contemporaries made the account lively especially because they were partial and these individual impressions cast a light on the persons that had caused them (esp. fr. 28). There is one common feature of all these βίαι: they are all written in the heat of the moment as a consequence of the attitude of the author against the persons he writes about, as a consequence of hatred against some of them, of love for others and of religious veneration for the one and only Pythagoras.

Aristoxenus is here an admirer and a panegyrist of Pythagoras and a malicious detractor of Socrates and Plato. This view is also maintained in the standard modern works on ancient biography, such as those of Stuart,³ Dihle,⁴ Momigliano,⁵ and Sonnabend,⁶ as well as in Wehrli's edition of the fragments.⁷ This evaluation is based on a chapter in Plutarch's *On the Malignity of Herodotus*, where a passage from Aristoxenus' *Life of Socrates* is presented as an example of malignity, and on another from Porphyry's *History of Philosophy*, in which the Neo-Platonist accuses Aristoxenus of being hostile to Socrates.⁸ The fragments of the *Life of Socrates* and the *Life of Plato* are generally seen as agreeing with the assessment in these texts. As a result, Aristoxenus' testimony has been widely neglected in biographical works on Socrates and Plato, whereas it is, surprisingly, highly valued as a source for the history of Pythagoreanism in Magna Graecia. The effort undertaken by von Mess in 1916 to rehabilitate Aristoxenus as a biographer of Socrates has not met with much approval. However, there

² Leo quotes here and in the following from Müller's collection of Aristoxenus' fragments (1848). Fr. 25 = fr. 52a-b Wehrli; fr. 41 = fr. 115 Wehrli; fr. 28 = fr. 54a Wehrli.

³ Stuart (1928), e.g., 131 and 158–9.

⁴ Dihle (²1970) 70 and (1987) 16.

⁵ Momigliano (²1993) 74–6.

⁶ Sonnabend (2002) 70–1.

⁷ Wehrli (^{1–2}1967–78) 2.48–54 and 65–8; (1968) 337 and 341–2.

⁸ fr. 55 Wehrli = Plu. *Her. mal.* 9 (856c) and Porph. fr. 212 Smith = Aristox. fr. 51 Wehrli = Cyr. *Adv. Iul.* 6.34 (817c).

have also been some other scholars before and after von Mess who — albeit in somewhat out of the way places — doubted that his biographies of Socrates and Plato could have been as one-sided as generally believed. Diels, e.g., notes in a footnote that “Spintharus-Aristoxenus is not such an evil calumniator as he is presented as being following Luzak’s one-sided criticism,” without going into details.⁹ Gudeman, in a review of Stuart’s book, points out that in Aristoxenus’ *Lives* of Socrates and Plato, slander (ψόγος) cannot have played a dominating role, basing this judgment on Plutarch’s testimony in *Non posse suaviter vivi secundum Epicurum* 10 = fr. 10a Wehrli.¹⁰ In his handwritten notes for his edition of the Aristoxenus fragments as part of *Fragmente der griechischen Historiker*, which are available to the Jacoby continuation project in Leuven, Jacoby shares this view as well.¹¹ Minar, in his monograph on the Pythagoreans, claims that the negative assessment of Aristoxenus is the consequence of the uncritical reverence of modern interpreters towards Socrates and Plato. Some of the traits that Aristoxenus ascribes to Socrates, he says, can be verified from Plato, others are not so negative as to prove enmity.¹² As for Aristoxenus’ picture of Pythagoras he concludes: “His historical data are mostly reliable, where they can be controlled,”¹³ on which Jacoby comments somewhat enigmatically in his handwritten notes: “a rehabilitation of the biographer (that probably deserves to be considered?).”¹⁴ In a paper at the 2006 conference on Hellenistic Biography in Würzburg, William W. Fortenbaugh pointed out that in Aristoxenus “Socrates is presented as a complex individual who was in most respects a man of moderation but in regard to sex a man of strong desire.”¹⁵ Concerning Plato he considers the evidence as mixed: some data are positive, others damning. And most recently, Carl Huffman, in his contribution to this volume, has also come to a more positive assessment of

⁹ Diels (1887) 258 n. 1. Diels here polemicizes against J. Luzak’s *Lectiones Atticae. De δῶγματι Socratis dissertatio* (1809).

¹⁰ Gudeman (1929) 43; this passage will be dealt with in detail below.

¹¹ P. 165 n. 127 of the manuscript.

¹² Minar (1942) 97–8.

¹³ Minar (1942) 98.

¹⁴ “Eine (wohl zu überlegende?) ehrenrettung des biographen” p. 157 n. 122 of the manuscript.

¹⁵ Fortenbaugh (2007) 73–6, the quotation is on 73.

Aristoxenus' *Life of Socrates*. I thus feel in good company, when I take up the cudgels for Aristoxenus in the following.

In order to define the character of Aristoxenus' biographies, I will study external and internal evidence. First, I will analyze the assessment of Aristoxenus by ancient authors, both as an author in general and also especially as an author of biographies. Some of them may still have had his complete works at their disposal or may at least have read more extensive excerpts than we possess today. It is a well known fact that ancient authors often manipulated quotations and paraphrases in order to fit their own arguments and that they had a preference for referring to an authority for spectacular information and for information which they wanted to prove wrong.¹⁶ Our sight is, therefore, likely to be blurred by the pieces of text transmitted under the name of a lost author, which may not be representative and which may give a distorted view as a consequence of the intentions of the source authors. In the second part of the paper, I will interpret some fragments that show how Aristoxenus worked as a biographer, taking into account the problems arising from indirect transmission, and I will try to show to what extent his way of working corresponds to and differs from that of other early biographers. This will, I hope, lead to a reappraisal of Aristoxenus both as a biographer and also as a historical source.

2. External Evidence

Cicero

In one of his letters to Atticus, Cicero presents Aristoxenus and Dicaearchus as models of erudition.¹⁷ Cicero admits to flattering his freedman Dionysius, the teacher of his son, as if he were Dicaearchus or Aristoxenus and not the garrulous and incompetent teacher that he was. Four times he mentions Aristoxenus in the *Tusculan Disputations*:¹⁸

¹⁶ On the difficulties in dealing with works transmitted indirectly, see Brunt (1980), who declares on p. 477 that collections of fragments "abound in mere allusions, paraphrases, and condensations, which are often very inadequate mirrors of what the lost historians actually wrote;" highly instructive is also Lenfant (1999). On the difficulties arising from the indirect transmission of Hellenistic biography, see Schorn in Schepens & Schorn (2010) 418–30.

¹⁷ Cic. *Att.* 8.4.1 = Aristox. fr. 4 Wehrli = Dicaearch. fr. 7 Mirhady.

¹⁸ Cic. *Tusc.* 1.19 = fr. 120a Wehrli; 1.24 = fr. 119 Wehrli; 1.41 = fr. 120b Wehrli and 1.51 = fr. 118 Wehrli.

In 1.19 = fr. 120a Wehrli he reports Aristoxenus' theory of the soul, speaking of him as "a musician as well as a philosopher" (*musicus idemque philosophus*). When he later criticizes his doctrine, he, however, considers it necessary to emphasize his erudition twice (1.41 = fr. 120b Wehrli): "Dicaearchus and his contemporary and fellow-pupil Aristoxenus, learned men of course (*doctos sane homines*)" he says,¹⁹ and somewhat later on Aristoxenus alone: "But let him, learned as he may be — and he is — (*quamvis eruditus sit, sicut est*) leave this subject to his master Aristotle, and himself teach singing." In *De finibus* 5.50 = fr. 69b Wehrli, Cicero praises him for having spent much energy on musicology²⁰ and also, in *De oratore* 3.132 = fr. 69a Wehrli, he shows admiration for him and Damon for having embraced the field of music as a whole. Cicero's admiration is certainly a consequence of Aristoxenus' enormous oeuvre of, allegedly, 453 books and especially of his authoritative position as a musicologist, but he also has respect for him as a philosopher. Would the Academic Cicero have shown such a highly positive attitude, if Aristoxenus had written slanderous biographies of Socrates and Plato?

Jerome and Suetonius

In the preface to *De viris illustribus* (1–2), published in 392 or 393, the Church Father Jerome announces that he will write short biographical sketches of all the ecclesiastical authors who wrote on the *Holy Scripture* in the period between the death of Christ and the 14th year of the reign of Theodosius, following the example of Suetonius. And he adds: "Among the Greeks Hermippus the Peripatetic (fr. 1 Wehrli = *FGrHist* 1026T1), Antigonus of Carystus (fr. 1 Dorandi), Satyrus (T 6 Schorn), a learned man, and Aristoxenus the musician — the most erudite by far of them all — (*longe omnium doctissimus, Aristoxenus musicus*; fr. 10b Wehrli) have undertaken a similar enterprise, as have Varro, Santra (T 6 Funaioli), Nepos, Hyginus and Tranquillus (fr. * 1 Reifferscheid) — whose example you urge us to follow — among the

¹⁹ *Dicaearchum vero cum Aristoxeno ... aequali et condiscipulo suo, doctos sane homines*; transl. Douglas (1985) 43. Here too, with *aequali et condiscipulo suo, doctos sane homines*, Wehrli leaves out an important part of the text.

²⁰ It is remarkable to find Aristoxenus here in a list of outstanding intellectuals together with Aristophanes of Byzantium, Pythagoras, Plato and Democritus even if Cicero may have taken it over from Posidonius, as Gigon and Straume-Zimmermann assume in their commentary (1988) 553.

Romans.”²¹ Scholars have agreed for a long time that Jerome did not read any of the Greek authors but found their names in the preface of Suetonius’ *De viris illustribus*, who referred to these authorities in the same or in a similar way to legitimate his own enterprise.²² Would Jerome have praised Aristoxenus in such a way, if the latter’s biographies of Socrates and Plato presented distorted and negative pictures of these philosophers? If he did not know anything about him, he certainly could have. But is it possible that he was familiar with some works of Aristoxenus, maybe via quotations in later authors? He only mentions Aristoxenus one other time, in his *Chronicle*, where he confuses him with the poet from Selinus, making him thus a contemporary of Archilochus and Simonides (fr. 9 Wehrli). Such a mistake rules out the possibility that he knew anything about his biographies around 380 when the *Chronicle* was composed. But if we assume hypothetically that by 393 he may at least have gotten some — indirect — knowledge of Aristoxenus as a biographer, we may doubt that he would have pronounced such a positive judgment on the Tarentine’s erudition, if he had the impression that the latter’s *Life of Socrates* had a polemical character, since Socrates is generally evaluated positively throughout Jerome’s works.²³ In *Epist.* 60.4 he notes in his favor that Socrates shared one of the fundamental Christian dogmas, that of the immortality of the soul, and also in other places, where he mostly uses material from the anecdotal tradition, the picture of the Athenian is generally positive. So he probably would not have praised someone who slandered Socrates.

The case of Plato is somewhat different. Jerome probably did not have direct knowledge of Plato’s dialogues, but he likes to refer to him as an authority.²⁴ Although he calls him “the first among philosophers” (*princeps philosophorum*)²⁵ and, in a letter of 387, deplores the

²¹ Transl. Bollansée (1999) 3 (slightly modified).

²² See Schorn (2004) 149 with the scholarship in n. 2.

²³ Socrates is mentioned twelve times by Jerome. The passages have been discussed by Opelt (1983) 201–2, whom I follow here; the major passages can be found in Giannantoni (1990) 1.336–7 (= *SSR* I G 88–94).

²⁴ Courcelle (²1948) 53–9; Hagendahl (1958) 126, 177, 317, etc. and Hagendahl and Waszink (1991) 134–5.

²⁵ *Adv. Pelag.* 1.14 (506d): *Quid Platoni et Petro? Ut ille enim princeps philosophorum, ita hic apostolorum fuit.* Plato is called *sapientiae princeps* also in *Adv. Jov.* 1.42 (273b).

fact that Plato was hardly read by anyone any more,²⁶ Courcelle is no doubt right when he observes that Jerome's general attitude towards the Athenian is negative and that he despises Plato as well as Pythagoras as a consequence of their doctrines on the human soul,²⁷ an assessment which is in agreement with Hagendahl's general conclusions about Jerome's views on pagan philosophers.²⁸ A negative portrayal of Plato by Aristoxenus would, therefore, have been unproblematic for Jerome. On the other hand, he would have probably objected to a hagiographical account of Pythagoras.

Be that as it may, since it cannot be shown that Jerome's assessment of Aristoxenus is based on real knowledge of the latter's works, it is wiser not to emphasize his testimony too much. It only proves that a Christian intellectual of the fourth century with a pagan educational background, who was active as a biographer, was not aware of any problematic aspects of Aristoxenus' biographies.

Not to be underestimated is, however, the fact that the characterization of Aristoxenus as *longe omnium doctissimus* most probably goes back to Suetonius. He listed him among his Hellenistic predecessors, and it is to be assumed that he presented him and the other authors he mentions as models for writing *De viris illustribus*. He would hardly have included Aristoxenus in his list, if this man had given an ill-founded negative account of Socrates and Plato. Admittedly, we do not know anything about Suetonius' philosophical views. If he had any at all, he did not articulate them in his *Lives*.²⁹ But Suetonius certainly cannot be blamed for being biased. In principle he presents positive as well as negative data on his heroes and to a large extent leaves it to his readers to draw their own conclusions on this basis. Since we have to assume that he was very familiar with the works of the Hellenistic

²⁶ In *Epist. ad Galat.* 3.487 (PL 26 401B): *quotusquisque nunc Aristotelem legit? Quanti Platonis vel libros novere, vel nomen? Vix in angulis otiosi eos senes recolunt*; cf. Courcelle (1948) 55–6 and Tigerstedt (1974) 11 with n. 56.

²⁷ Courcelle (1948) 56.

²⁸ Hagendahl (1958) 317: "His attitude towards the philosophers is mostly unfavorable or hostile, partly on the ground that the heretics rely on them."

²⁹ Cf. Gascou (1984) 713–16 with n. 20. Plato is mentioned once, but in an apophthegma of Caligula (*Cal.* 34.3). This interpretation represents the *communis opinio*; differently Cizek (1977) 160–7, who wants to see some influence of the New Academy in Suetonius' *Lives*. The evidence he adduces is however weak. If he were right, a positive assessment of an enemy of Plato would certainly be excluded.

biographers he refers to, we have to conclude that Aristoxenus' biographies were not characterized by unjustified polemics.

Plutarch

Fr. 10a Wehrli comes from Plutarch's *Non posse suaviter vivi secundum Epicurum* (9–10 1092c–1093c). I quote it here with more context than in Wehrli's edition:

ὑπομνήσαι δὲ βραχέως αἱ θ' ἱστορίαι πάρεισι πολλὰς μὲν ἐπιτερεῖς διατριβὰς ἔχουσαι τὸ δ' ἐπιθυμοῦν ἀεὶ τῆς ἀληθοῦς ἀκόρεστον καταλείπουσαι καὶ ἅπληστον ἡδονῆς· δι' ἣν οὐδὲ τὸ ψεῦδος ἀμοιρεῖ χάριτος, ἀλλὰ καὶ πλάσμασι καὶ ποιήμασι τοῦ πιστεύεσθαι μὴ προσόντος ἔνεστιν ὅμως τὸ πείθον. (10) ἐννόει γάρ, ὡς δακνόμενοι τὸν Πλάτωνος ἀναγινώσκομεν Ἀτλαντικὸν καὶ τὰ τελευταῖα τῆς Ἰλιάδος, οἷον ἱερῶν κλειομένων ἢ θεάτρων ἐπιποθοῦντες τοῦ μύθου τὸ λειπόμενον. αὐτῆς δὲ τῆς ἀληθείας ἡ μάθησις οὕτως ἐράσμιόν ἐστι καὶ ποθεινὸν ὡς τὸ ζῆν καὶ τὸ εἶναι, διὰ τὸ γινώσκειν· τοῦ δὲ θανάτου τὰ σκυθρωπότατα λήθη καὶ ἄγνοια καὶ σκότος. ἥ καὶ νῆ Δία μάχονται τοῖς φθείρουσι τῶν ἀποθανόντων τὴν αἴσθησιν ὀλίγου δεῖν ἅπαντες, ὡς ἐν μόνῳ τῷ αἰσθανομένῳ καὶ γινώσκοντι τῆς ψυχῆς τιθέμενοι τὸ ζῆν καὶ τὸ εἶναι καὶ τὸ χαίρειν. ἔστι γὰρ καὶ τοῖς ἀνιώσι τὸ μεθ' ἡδονῆς τιнос ἀκούεσθαι· καὶ ταραπτόμενοι πολλάκις ὑπὸ τῶν λεγομένων καὶ κλαίοντες ὅμως λέγειν κελεύομεν, ὥσπερ οὗτος·

‘οἶμοι πρὸς αὐτῷ γ' εἰμὶ τῷ δεινῷ λέγειν.’

‘κἄγωγ' ἀκούειν· ἀλλ' ὅμως ἀκουστέον’ (Soph. OT 1169–70).

ἀλλὰ τοῦτο μὲν ἔοικε τῆς περὶ τὸ πάντα γινώσκειν ἡδονῆς ἀκρασία τις εἶναι καὶ ῥύσις ἐκβιαζομένη τὸν λογισμόν, ὅταν δὲ μηδὲν ἔχουσα βλαβερόν ἢ λυπηρόν ἱστορία καὶ διήγησις ἐπὶ πράξεσι καλαῖς καὶ μεγάλας προσλάβῃ λόγον ἔχοντα δύναμιν καὶ χάριν, ὡς τὸν Ἡροδότου τὰ Ἑλληνικὰ καὶ τὰ Περσικὰ τὸν Ξενοφώντος,

‘ὅσσα θ' Ὅμηρος ἐθέσπισε θέσκελα εἰδῶς’ (Suppl. Hell. 1153)

ἢ ἅς Περιόδους Εὐδοξος (fr. 272 Lasserre) ἢ Κτίσεις καὶ Πολιτείας Ἀριστοτέλης ἢ Βίους ἀνδρῶν Ἀριστοξένος ἔγραψεν, οὐ μόνον μέγα καὶ πολὺ τὸ εὐφραίνειν ἀλλὰ καὶ καθαρόν καὶ ἀμεταμέλητόν ἐστι. τίς δ' ἂν φάγοι πεινῶν καὶ πίοι διψῶν τὰ Φαιάκων ἥδιον ἢ διέλθοι τὸν Ὀδυσσεῶς

ἀπόλογον τῆς πλάνης; τίς δ' ἂν ἡσθεῖη συναναπαυσάμενος τῇ καλλίστῃ γυναικὶ μᾶλλον ἢ προσαγρυπνήσας οἷς γέγραφε περὶ Πανθείας Ξενοφῶν (Cyr. 4.6.11–7.3.16) ἢ περὶ Τιμοκλείας Ἀριστόβουλος (FGrHist 139F2) ἢ Θήβης Θεόπομπος (FGrHist 115F337)

For a brief reminder, however, we can appeal first to history, providing as it does many hours of agreeable pastime, but yet leaving us with our thirst for more and still more truth insatiable and unblunted with pleasure; a pleasure moreover which lends to fiction a power to charm, and the purest fabrications and poetic inventions, to which no belief is accorded, are none the less enticing. (10) Thus reflect how keenly we are stirred as we read Plato's tale of Atlantis and the last part of the *Iliad*; we regret as much to miss the rest of the story as if it were some temple or theatre for which the hour of closing had come. But to learn the truth itself is a thing as dear to us and desirable as to live and be, because it brings us knowledge, and the most dismal part of death is oblivion and ignorance and darkness. Indeed it is for this that almost the whole of mankind are opposed to those who deny all awareness to the dead, showing in this that they take living and being and the feeling of delight to be found only in the part of the soul that is aware and knows. For even those who bring us painful news are nevertheless listened to with a certain pleasure, and although it often happens that we are disturbed by what is said and weep, we nevertheless bid them speak on, as in the play:

– Ah! Now I come to what I dread to utter.

– And I to hear; yet hear the thing I must. (Soph. *OT* 1169–70)

Here, however, it appears that somehow the delight we take in knowing the whole story gets out of hand and a strong current of passion overpowers our reason. But when history or narrative involves no harm or pain, and to its theme of splendid and great actions it adds the power and charm of eloquence, as do Herodotus' *Greek History*, Xenophon's *Persian History* and

The wondrous word inspired Homer sang (Suppl. Hell. 1153) or Eudoxus' *Description of the World*, Aristotle's *Foundations and Constitutions of Cities*, or Aristoxenus' *Lives*, the joy it gives is not only great and abundant, but untainted as well and attended with no regret. Who would take greater pleasure in stilling his hunger or quenching his thirst with Phaeacian good cheer than in following Odysseus' tale of his wanderings? Who would find greater pleasure in going to bed with the most beautiful of women than in sitting up

with Xenophon's story of Pantheia, Aristobulus' of Timocleia, or Theopompus' of Thebê?³⁰

Wehrli only prints ὅταν δὲ μηδὲν ... χάριν, ὥς and ἡ βίου ... ἀμεταμέλητόν ἐστι, but the context in which Aristoxenus is mentioned is very instructive, not to say decisive, and should thus not be neglected. *Non posse suaviter* is a philosophical dialogue with Aristodemus and Theon as main speakers. Zeuxippus and Plutarch himself are present too, but only speak a few words. The work stages a conversation following a lecture given by Plutarch on the Epicurean Colotes' treatise, *On the point that it is not possible even to live according to the doctrines of other philosophers*, that corresponds to Plutarch's *Against Colotes*. Now, Aristodemus and Theon aim at proving that it is not possible to live according to Epicurus' theory that pleasure is the goal. Theon is the speaker at 1093b-c, so one might think that he, being a figure in a dialogue, does not necessarily express Plutarch's views.³¹ The grammarian Theon appears often in Plutarch's works, from the earliest to the latest, where he is portrayed as a man of great culture. Apparently he was one of Plutarch's closest philosophical friends. Puech even considers him some kind of stand-in for Plutarch.³² In *Non posse suaviter* he appears as "a perfectly trained Academic philosopher and a professed enemy of Epicureanism,"³³ as Ziegler puts it. In the passage in question, he speaks without irony and he comes back later to Aristoxenus in a list of specialists in certain areas, where Aristoxenus is mentioned as an expert in modulation together with Theophrastus (fr. 715 FHS&G) as a specialist in concords and Aristotle (fr. 99 Rose) as a specialist in Homer.³⁴ Even if the rhetorical question

³⁰ Transl. Einarson and De Lacy (1967) 57–61 (slightly modified).

³¹ Theon is, with interruptions, speaker of the first section from 3–19 (1087c–1100c) and again from 25–31 (1104a–1107c).

³² Puech (1992) 4886: "Partout, Théon apparaît comme une sorte de double de Plutarque." Cf. Ziegler (1934) 2064: "Aus dieser Darstellung sowie aus der lebenslänglichen Freundschaft und geistigen Vertrautheit mit Plutarch ergibt sich, daß er im großen ganzen ein diesem ähnlicher Mensch von ähnlicher Bildung gewesen sein muß, in der ihn nur die stärkere Betontheit des grammatisch-philologischen Interesses von dem universaler gerichteten Freund unterschieden haben mag." Against the idea that there were three different persons named Theon, *ibid.*, 2064–6, followed by Zacher (1982) 16–7 and Puech (1992) 4886.

³³ Ziegler (1934) 2064.

³⁴ 13 (1095e).

at the end of the quoted text is no doubt overenthusiastic — Pelling speaks of “over-argument”³⁵ — Theon’s fundamental statement that the passages from Xenophon, Aristobulus and Theopompus that he lists are outstanding reading cannot be doubted. Not even Plutarch, who is “present” while these words are being spoken, opposes Theon. I will come back later to the question whether Theon here serves as Plutarch’s mouthpiece. It may suffice for the moment to note that Plutarch has an Academic philosopher make such a positive statement about Aristoxenus.

Theon’s (and perhaps Plutarch’s) assessment of Aristoxenus’ *Lives* in this passage is of interest for our assessment of these works in several respects. First, he regards Aristoxenus’ *Lives* as “history about splendid and great actions” (ιστορία ... ἐπὶ πράξεσι καλαῖς καὶ μεγάλαις). That he uses the word ἱστορία (“history”) is fundamental, especially if we bear in mind that modern scholarship on classical literature usually distinguishes historiography from biography on the basis of the first chapter of Plutarch’s *Life of Alexander*, where both genres are set against one another. As a consequence, the latter is regarded as part of so-called antiquarian literature by modern scholars. Hence, Theon holds a concept of ἱστορία that goes beyond historiography *stricto sensu* as it not only comprises Herodotus’ *Hellenica*, Xenophon’s *Persica* (i.e., *Cyropaedia*), Theopompus’ *Philippica* or *Hellenica* and Aristobulus’ *History of Alexander*, but also Eudoxus’ *Periodos* (i.e., geography), Aristotle’s *Foundations* and *Constitutions* (i.e. antiquarian literature) and Aristoxenus’ *Lives of men* (i.e., biography).³⁶ What scholars, following Momigliano’s authoritative interpretation,³⁷ today generally keep distinct, historiography in a strict sense on the one hand and antiquarian literature on the other, are here put on the same level and classified as ἱστορία. But there is more. For Theon ἱστορία implies scholarly research, especially on the past, with the intention of uncovering the truth, as he makes clear twice in

³⁵Pelling (2007) 156.

³⁶Homer’s epics appear on this list but are not, however, regarded as ἱστορία. In the preceding section Theon had described the *Iliad* as ψεῦδος, as “myth.” Here, he says both history (ἱστορία) and fiction (διήγησις) can be read without regret; the *Iliad* thus serves as an example for the latter. For a more detailed analysis of the argument see my forthcoming commentary.

³⁷Momigliano (1993) 12, 41 and 109; Schepens (2007) rightly contests this view.

this passage.³⁸ This characteristic he concedes to the aforementioned works, including Aristoxenus' *Lives*.

Second, Theon emphasizes the positive effect these works have on the reader and he characterizes their contents as “splendid and great actions” (πράξεις καλαὶ καὶ μεγάλαι). Their content is thus contrasted with the aforementioned unpleasant information that men want to acquire on account of a sometimes irrational desire for knowledge. He states that the presentation is rhetorically powerful and attractive (προσλάβη λόγον ἔχοντα δύναμιν καὶ χάριν), that reading it “involves no harm or pain” (μηδὲν ἔχουσα βλαβερόν ἢ λυπηρόν) and that “the joy it gives is not only great and abundant, but untainted as well and attended with no regret” (οὐ μόνον μέγα καὶ πολὺ τὸ εὐφραίνον ἀλλὰ καὶ καθαρόν καὶ ἀμεταμέλητόν ἐστι).³⁹ From this passage Gudeman rightly concluded that slander (ψόγος) cannot have played a prominent role in Aristoxenus' biographies. I would even go one step further. The Platonist Plutarch would hardly have the Platonist Theon praise in such a manner a work that was hostile towards Socrates and Plato or that was a crude encomiastic biography of Pythagoras, in which the hero is presented as the only philosophical ideal at the expense of all other philosophers. Although Plutarch has respect for Pythagoras and sees him as a forerunner of Plato, Pythagoras is a distant second to the Athenian, and Plutarch sometimes distances himself from Pythagorean doctrine. In contrast he greatly admires Socrates and praises Plato as the perfection of philosophy. Such a view seems to have been standard among Platonists of his time, and is, therefore, shared by the literary figure Theon. An account that contradicts this view, even if it were true, would not be attractive reading for such a philosopher. The argumentative context thus shows that, all in all, the information found in Aristoxenus cannot have been slanderous, to say the least.

Finally, it remains to be explained how the positive evaluation of Herodotus and Aristoxenus in this passage can be reconciled with the

³⁸ Cf. Pelling (2007) 156 with n. 39. Pelling makes this point very clear (156): “What is more, the context in the essay makes it clear that Plutarch is concerned here with truth as well as with moral uplift: the reason why the pleasure is so ‘pure’ is that the events [Pelling here speaks about the Persian War] were the way the narrative describes them.”

³⁹ Transl. Einarson and De Lacy (1967) 59–61.

harsh criticism of Herodotus' general credibility and honesty in *De Herodoti malignitate*. There we find Aristoxenus mentioned in a list of authors who were in certain respects malicious. Is Theon thus not Plutarch's mouthpiece and are the statements in *Non posse suaviter* not in agreement with Plutarch's personal opinion? In order to give an answer to this question we first have to analyze *De Herodoti malignitate* and especially the passage in which Plutarch discusses Aristoxenus (9 [856c-d] = fr. 55 Wehrli). In Wehrli's edition it reads as follows:

Ἐγγὺς δὲ τούτων εἰσὶν οἱ τοῖς ψόγοις ἐπαίνους τινὰς παρατιθέντες, ὥς ἐπὶ Σωκράτους Ἀριστόξενος, ἀπαιδευτον καὶ ἀμαθὴ καὶ ἀκόλαστον εἰπὼν, ἐπήνεγκεν “ἀδικία δ’ οὐ προσήν.”

Similar to these writers are those who qualify their censure with some expressions of praise, as Aristoxenus did in his verdict on Socrates, calling him uneducated, without knowledge and licentious, and adding “but there was no real harm in him.”⁴⁰

But here too we have to take the context into consideration, since Plutarch states subsequently:

ὥσπερ γὰρ οἱ σὺν τινι τέχνῃ καὶ δεινότητι κολακεύοντες ἔστιν ὅτε πολλοῖς καὶ μακροῖς ἐπαίνουσι ψόγους παραμυγνύουσιν ἐλαφροῦς, οἷον ἡδυσμα τῇ κολακείᾳ τὴν παρρησίαν ἐμβάλλοντες, οὕτω τὸ κακότηδες εἰς πίστιν ὧν ψέγει προϋποτίθεται τὸν ἔπαινον.

Just as men who flatter with some degree of skill and finesse sometimes mingle expressions of gentle criticism with their catalogue of praises, introducing the element of frankness as a sort of seasoning to their flattery, so malice offers some preliminary praise to make its accusations seem convincing.⁴¹

This is a description of the last of eight ways of being malicious (*κακοήθης*) that Plutarch lists at the beginning of his work. Plutarch uses Aristoxenus as the example of an author who is *κακοήθης*, because he adds positive remarks to his criticism in order to be persuasive. Comparing him with flatterers who add a little criticism to their

⁴⁰ Transl. Pearson (1965) 19 (slightly modified).

⁴¹ Transl. Pearson (1965) 19–21.

flattery, he even suggests that the negative aspects were quantitatively more prominent.

The correct understanding of this passage is closely connected to that of the entire *De Herodoti malignitate*, which has puzzled scholars for a long time. In this pamphlet Plutarch quite aggressively and often unfairly attacks Herodotus for being a malicious and systematic liar. He declares it his intention to defend his Boeotian ancestors and all the other Greeks against the lies of the historian, since they have all suffered under the vicious distortions of Herodotus. Today, hardly anyone still regards *De Herodoti malignitate* as spurious (which would immediately solve many problems of interpretation).⁴² Furthermore, it is improbable that Plutarch changed his mind between the time he wrote *Non posse suaviter* and — most probably later — *De Herodoti malignitate*.⁴³ It cannot be the case that *Non posse suaviter* refers just to the literary quality of Herodotus' *History*, which Plutarch concedes to the historian, while he disputes Herodotus' ability as a reliable historian in *De Herodoti malignitate*, as Theander and others think.⁴⁴ As stated above, Theon's words show that he also conceded that Herodotus had the intention of presenting an account in accordance with the facts (ιστορία). In the most recent contribution to the problem, Pelling explains the differences as a consequence of different genres: "It does indeed appear that Plutarch can have different mindsets and follow different principles at different generic moments." Pelling shows that Plutarch in his *Life of Themistocles* does not even himself meet the demands made for good historiography in *De Herodoti malignitate*, where his account is by no means complimentary to all Greeks.⁴⁵

If Plutarch thus judges the same works and authors differently according to genre, one wonders whether his testimony can be used at all, or, if it can, to which of the two evaluations one should attach greater importance. Therefore, we have to ask ourselves to which

⁴² So still Podlecki (1975) 92; but see Harrison (1992) 4663 and Hershbell (1993) 143.

⁴³ On this possibility see Pelling (2007) 157, who however does not endorse it.

⁴⁴ So Theander (1951) 45–6 and also Hershbell (1993) esp. 151–7.

⁴⁵ Cf. Pelling (1990) 32–5 = (2002) 150–2 for more violations against the principles from *De Herodoti malignitate* in Plutarch's *Lives*. The same is shown by Teodorsson (1997) 443–6 for the *Life of Themistocles* and for other biographies. He goes as far as to maintain that these principles do not play any role in the *Lives*; differently Wardman (1974) 192; cf. Russell (1973) 61–2.

literary genres *Non posse suaviter* and *De Herodoti malignitate* belong, what function the references to the various historians have and whether there is any reason to believe that, due to rhetorical strategy, Plutarch may affirm something that does not correspond to his personal opinion or may have an interlocutor in a dialogue utter such a statement.

I will deal with *De Herodoti malignitate* first. A crucial step for a correct understanding of that work has been taken by Homeyer, who has convincingly interpreted it as standing in the tradition of literary and historiographical polemics in the Hellenistic period.⁴⁶ The venomous attacks against Herodotus, she explains, distinguish this work from others of Plutarch. His allegations are mostly ill-founded. He quotes single phrases out of context or paraphrases inaccurately in order to give a negative interpretation, and in doing so his line of argument is rarely convincing. His allegations against Herodotus sometimes also apply to himself. This method, including false allegations and personal slander, corresponds to what is common in such works of literature, as Homeyer points out. Polybius' nasty and often unjustified criticism of his predecessors in book 12 presents a good parallel.⁴⁷

More recently Seavey has interpreted the work as a *controversia*, i.e. a fictional court-speech, which is characterized by greater license than historiographical and philosophical works. He has shown that it has the structure of a court-speech and that it contains juridical vocabulary and other elements of forensic oratory. He is right in claiming that in such a speech truth and fairness do not matter and that the speaker does not shrink from anything that may convince the jury, not even from lying and deceiving, if demanded by the situation.⁴⁸ Although, as

⁴⁶ Homeyer (1967); Pearson (1965) 6 regards *De Herodoti malignitate* as an ethical essay: "The *De Malignitate* is an ethical essay, not an attempt at historical criticism or a political pamphlet in defense of the Boeotians; and Plutarch's credit is better preserved if this is constantly borne in mind by his readers."

⁴⁷ Homeyer (1967) 184 refers to the polemics that we find in Polybius against Theopompus, Ephorus and Timaeus; on Plutarch's way of working see also Bowen (1992) 4–9. Marincola (1994) esp. 194–5 defends the historiographical character of *De Herodoti malignitate* and emphasizes the role of polemics in the context of historiography. The motives for Plutarch's enmity do not need to be discussed here; for various explanations, see Homeyer (1967); Hershbell (1993) 159–62; Teodorsson (1997) esp. 440 and 447 and Bowen (1992) 3–4.

⁴⁸ Seavey (1991); cf. already Russell (1973) 60: "Perhaps it could be called a kind

I think, *De Herodoti malignitate* cannot be regarded as a *controversia* in the strict sense, since such literary topics do not seem to be attested for that genre,⁴⁹ the similarities Seavey has discovered help us understand this work better and they supplement and support Homeyer's interpretation. We do not know much about what was usual in literary and historiographical polemics, but elements from law-court speeches seem to have been common in such works. The use of these features, as Hershbell remarks, can be regarded as quite natural, since both historians and forensic speakers have to convince an audience to follow their reconstruction of the events rather than that of their opponents.⁵⁰ And Flower, following Rohde, notices that "Theopompus writes like a prosecuting attorney, using crude and low language in order to make personal attacks."⁵¹ We cannot go into further details regarding this characteristic of Hellenistic historiography. It suffices to observe here that the contributions of Homeyer and Seavey have made it clear that in such a work we have to reckon with serious distortions of the truth.

On the other hand, it cannot be excluded that Theon in *Non posse suaviter* twists the facts and is not very particular about truth. History is often "adapted" to philosophical truth in philosophical works and historians may be praised or criticized unduly. But it is very difficult to think of any reason why distortion should be employed in the passage in which Theon refers to Aristoxenus' biographies. He could have chosen from an enormous number of historians those that had a good reputation in order to illustrate his statement that historiography can be pleasant and profitable reading. He had absolutely no reason to include an author who was controversial.

So one is likely to be inclined to give more weight to Plutarch's statement in *Non posse suaviter*. This assumption is confirmed by another test. It seems to be promising also to review how Plutarch, in his other works, evaluates the various authors presented in *Non*

of scholarly *controversia*. Herodotus is, as it were, on trial in the imagination, and any forensic cliché or sharp practice can be used to discredit him"; cf. also Bowen (1992) 4; but see the qualifying remarks on Seavey by Hershbell (1993) 158–9. Nikolaidis (1997) 339 n. 37 regards the essay as standing in the tradition of historiographical and juridical rhetoric, but concludes: "since moralizing is peculiar to both rhetoric and ancient historiography, the treatise defies exact genre-classification."

⁴⁹ On *controversiae* see Clarke (1966) 90–5 and Kennedy (1972) 314–24.

⁵⁰ Hershbell (1993) 158.

⁵¹ Flower (1997) 177; cf. Rohde (1901) 17–9.

posse suaviter as exemplary and those criticized or recommended in *De Herodoti malignitate*. In the former case these are Herodotus, Xenophon, Homer, Eudoxus, Aristotle, Aristoxenus and single passages from Xenophon, Aristobulus and Theopompus, in the latter Thucydides, the poets of Old Comedy, Theopompus, Ephorus, Philistus and Aristoxenus. Such a review will give us insight into how his various assessments of authors, and especially that of Aristoxenus, should be evaluated.

I begin with *Non posse suaviter*. It appears that the assessments of authors in this treatise, with the single exception of Herodotus, correspond to those in other works of Plutarch. Herodotus is indeed generally assessed critically or negatively in the *Lives* and in the *Moralia*.⁵² As for Xenophon, all of Plutarch's works testify to his enthusiasm for the Athenian.⁵³ He also admires Homer who is "admirable" (θαυμαστός) and "the wisest" (σοφώτατος) (*Alex.* 26.7) and the poet most quoted in his works.⁵⁴ Eudoxus is listed among the "wisest of the Greeks" (Ἑλλήνων οἱ σοφώτατοι)⁵⁵ in *De Iside et Osiride*, and other works also show that Plutarch thinks highly of him.⁵⁶ The same is true for Aristotle whom Plutarch praises several times and who takes second place after Plato despite some criticism on occasion.⁵⁷ In the case of Aristoxenus the other references in Plutarch's works are indicative as well. He is quoted for single pieces of information about the Spartan Lycurgus and Alexander the Great.⁵⁸ In the only place where he is referred to for information on Plato, Plutarch does not indicate that he

⁵² For Plutarch's assessment of Herodotus see Hershbell (1993); cf. Pelling (2007).

⁵³ Münscher (1920) 127–30 (with references).

⁵⁴ On Plutarch and Homer see, e.g., de Wet (1988) 15–20; Alexiou (2000); D'Ippolito (2004) (with literature) and Bréchet (2005); I have not seen Bréchet (2003), which is summarized in Bréchet (2004–5).

⁵⁵ *De Isid.* 10 (354 d–e) = T 17 Lasserre.

⁵⁶ In *Non posse suaviter* (11 [1094a–b]), shortly after the passage in discussion, Theon praises Eudoxus again; cf. *Adv. Col.* 32 (1126c–d) = D 70 Lasserre (a positive remark on Eudoxus as a law-giver) and *Marc.* 14.9 = D 27 Lasserre (admiration for his achievements in the fields of mechanics and geometry); the disagreement on a question of detail in *Pyth. or.* 17 (402d) = F 352 Lasserre can be ignored.

⁵⁷ *Stoic. rep.* 15 (1041a); Plutarch speaks of Plato and Aristotle as δυνεῖν τῶν ἀρίστων φιλοσόφων. The places where Plutarch speaks of Aristotle have been collected and discussed by Donini (1986) 215–19 and Babut (1994) 522–5 = (1996) 23–8.

⁵⁸ *Lyc.* 31.4 = fr. 44 Wehrli and *Alex.* 4.4 = fr. 132 Wehrli.

regards his testimony as untrustworthy.⁵⁹ In the list of authors quoted for Socrates' bigamy, he is only one authority among several. And even though Plutarch, following Panaetius, contests the historicity of the story, he is far from being polemical.⁶⁰ All this points to a generally favorable attitude toward Aristoxenus.

In addition to these general assessments of whole works of authors, Plutarch also speaks of three specific passages in historical works, which he considers outstanding pieces of historiography. The enthusiastic praise for the presentations of the three women Pantheia, Timocleia and Thebe, which are found in the works of Xenophon, Aristobulus and Theopompus, is also compatible with the assessments of these authors elsewhere in the *Corpus Plutarcheum*. I have already spoken about Xenophon above. The story of Timocleia from Aristobulus seems to have been one of Plutarch's favorites, since he tells it in detail in *Mulierum virtutes* 24, less elaborately in *Alexander* 12, and he also mentions it in *Coniugalia praecepta* 48 (145f).⁶¹ Theopompus, however, is an author Plutarch appreciates less due to the latter's predilection for criticism and polemics. In the case of six out of eighteen quotations from his works, Plutarch adds critical or ironical remarks.⁶² However, this general antipathy does not prevent Plutarch from appreciating individual parts of this historian's works. This becomes clear in a passage in which Plutarch gives a programmatic statement about his use of Theopompus. He declares (*Lysander* 30.2 = *FGrHist* 115F333) that one has to believe Theopompus more when he praises than when he criticizes, since he prefers criticizing to praising. This is precisely what Plutarch does in the passage under discussion. As in the case of the Timocleia story, Plutarch tells the story of Thebe more elaborately

⁵⁹ *Tim.* 15.5 = fr. 32 Wehrli.

⁶⁰ *Arist.* 27. 3–4 = Giannantoni (1990) 1.36 (= *SSR* I B 49) = fr. 58 Wehrli.

⁶¹ Although Plutarch only mentions Aristobulus as a source in our passage, it is rightly assumed in modern scholarship that he has also used the latter's Alexander history in other places. Jacoby even prints *mul. virt.* 24 among the fragments of Aristobulus in small print together with the passage from *Non posse suaviter* (*FGrHist* 139F2a-b); on Plutarch's use of Aristobulus' Timocleia story, cf. Pearson (1960) 154–155; Stadter (1965) 112–5 and Hamilton (1969) LV and 31. Seavey (1991) 41 is not right in assuming that Plutarch insinuates that Thebe has base motives in the *Life of Pelopidas*.

⁶² Cf. Theander (1951) 58.

elsewhere, in *Pelopidas* 35, without naming his source, Theopompus, which shows his sympathy with this account.⁶³

With Theopompus we have come to the authors who are criticized in *De Herodoti malignitate*. In the introductory chapters Plutarch describes different forms of malignity (κακοήθεια), for which he gives illustrative examples from earlier historians. He creates an artificial ideal of historiography that enables him to interpret basically any critical remark in a historiographical work as a result of malignity.⁶⁴ As he does in the main section on Herodotus, he here deals sloppily with the texts of the authors to whom he refers and he adapts them to the needs of his current argument.

He first places Herodotus on a level with Theopompus, who is for him and for others the malicious historian par excellence,⁶⁵ and maintains that Herodotus' malignity is "of a smoother and softer variety than that of Theopompus, but its effect is more penetrating and more painful — just as winds can create more discomfort by seeping through a narrow crack than when they spend their force out in the open."⁶⁶ Thucydides, on the other hand, serves as a positive example throughout the introduction,⁶⁷ which is in agreement with his overall positive attitude towards Thucydides in other works. He presents him as a historian who does not use severe (δυσχερεστάτοις) words to characterize persons, if friendlier terms are at hand (ἐπεικεστέρων παρόντων).⁶⁸ As an example, he refers to the Athenian's descriptions of Nicias and Cleon, but he conceals the fact that Thucydides, in other places than those referred to here, is much less unsparing in his criticism of Cleon and that, on the whole, he gives a distorted picture of the demagogue.⁶⁹ Furthermore, Plutarch himself uses the word madness (μανία) in describing Cleon in *Nic.* 7.6, whereas its use is

⁶³ Cf. Westlake (1939) 14–5; the use of Theopompus in the *Life of Pelopidas* is considered as a possibility also by Georgiadou (1997) 24–5 and 223.

⁶⁴ Cf. Pearson (1965) 5.

⁶⁵ *Her. mal.* 1 (855a); on the negative image of Theopompus as a historian see the testimonies collected by Jacoby under *FGrHist* 115T25; cf. Homeyer (1967) 184 and Flower (1997) 169–183, esp. 176–7.

⁶⁶ Plu. *Her. mal.* 1 (855a); transl. Pearson (1965) 11.

⁶⁷ On this see Lachenaud in Cuvigny and Lachenaud (1981) 117.

⁶⁸ Plu. *Her. mal.* 2 (855b).

⁶⁹ Pearson (1965) 11 n. e with reference to Thuc. 4.39.3.

regarded here as a sign of malignity (κακοήθεια).⁷⁰ Subsequently he presents Thucydides as an author who leaves out information that is discreditable to a person, when it is not relevant for the account. Here too, Cleon serves as an example, since Thucydides “never gave any specific account of his misdeeds,” which is again misleading; he notes on the positive side that Thucydides contents himself with calling the demagogue Hyperbolus “mean” (μοχθηρός).⁷¹ He himself is again more critical towards Hyperbolus and goes further in characterizing him negatively in the *Life of Nicias*.⁷² The comic poets are also accused of malignity, since they claim that Pericles started the Peloponnesian War on account of Aspasia and Phidias.⁷³ Here too, Plutarch himself reports this allegation in the *Life of Pericles* without pronouncing himself seriously against its correctness.⁷⁴ Ephorus is assessed positively, since, although he knew of the treachery of Themistocles, he said: “when Pausanias told him about it and invited him to share in the expected rewards, he was not persuaded to accept the offer.”⁷⁵ Here Plutarch conceals that Ephorus’ *Historiae* was fundamentally pro-Athenian and anti-Spartan⁷⁶ and that this may be the reason for his not charging Themistocles with treachery. Plutarch’s complaint that Herodotus was biased towards certain cities, would thus also apply to Ephorus. Furthermore, he fails to note that Ephorus, following Old Comedy, is among the authors who regard the events around Phidias and Anaxagoras as the reason that Pericles started the Peloponnesian War, a story that reveals, according to Plutarch, the malignity of the comic poets, as I have noted above.⁷⁷ Furthermore, Plutarch himself

⁷⁰ Pearson (1965) 11 n. e.

⁷¹ Plu. *Her. mal.* 3 (855c); transl. Pearson (1965) 13.

⁷² Plu. *Nic.* 11.3–8; cf. Pearson (1965) 17 n. b.

⁷³ Plu. *Her. mal.* 6 (855f–856a).

⁷⁴ Plu. *Per.* 24–32 (Samian and Peloponnesian Wars); cf. Pearson (1965) 17 n. b.

⁷⁵ *Her. mal.* 4 (855f–856a) = Ephor. *FGrHist* 70F189 (transl. Pearson [1965] 15–17). See also 36 (869a) = *FGrHist* 70F187, where Plutarch refers to Ephorus against Herodotus.

⁷⁶ On this characteristic of Ephorus’ *Historiae*, see Barber (1935) 88–105.

⁷⁷ D. S. 12.38 = *FGrHist* 70F196. There is an excellent reconstruction and interpretation of Ephorus’ discussion of the outbreak of the Peloponnesian War in Schepens (2007a) 77–99.

is quite critical of Ephorus in other parts of his *oeuvre* and we get the impression that he was not among his favorites.⁷⁸

An even odder positive example is Philistus of Syracuse, who is lauded together with Thucydides for leaving out negative reports, if they are not relevant to the historical account. In an overly subtle way Plutarch argues that he “omitted all the crimes of Dionysius against the barbarians which were not tied up with the story of Greek events.”⁷⁹ Philistus was for many years a very close associate of the tyrant Dionysius I, and he dedicated the last four books of his eleven-volume *Sicilian History* to the rule of Dionysius, presenting him not as a tyrant but as the perfect monarch.⁸⁰ If it did not totally run counter to Plutarch's argument, one would be inclined to think that he speaks with irony when he recommends keeping some of the crimes of a tyrant secret. How is this consistent with the historian's goal of uncovering and reporting the truth? Instead, the partiality of the propagandist is reinterpreted positively as abstinence from malignity. In his other works, especially in the *Life of Dion*, Plutarch's picture of Philistus is, however, extremely negative. He is presented as the leader of the opposition against the political reforms of Dion and Plato,⁸¹ and, in a programmatic statement, Plutarch vigorously attacks his pro-tyrannical attitude: “for, although he is most skillful in furnishing unjust deeds and base natures with specious motives, and in discovering decorous names for them, still, even he, with all his artifice, cannot extricate himself from the charge of having been the greatest lover of tyrants alive, and more than anyone else always an emulous admirer of luxury, power, wealth, and marriage alliances of tyrants.”⁸²

⁷⁸ *Praec. rei publ. ger.* 6 (803b) = *FGrHist* 70T21 (Plutarch criticizes the speeches of generals in his work); *De garr.* 22 (514c) = *FGrHist* 70F213 (garrulity); on Plutarch's criticism of Ephorus' praise of Philistus, see below.

⁷⁹ *Her. mal.* 3 (855c-d) = Philist., *FGrHist* 556T13b (transl. Pearson [1965] 13). Differently Muccioli (2000) 303–4, who thinks that Philistus is being criticized here; the interpretation by Theander (1951) 34 and 63–5, who emphasizes the varying assessments of Philistus in Plutarch, is correct.

⁸⁰ On this aspect of Philistus' *Sicilian History*, see Schorn (2010).

⁸¹ See esp. Plu. *Dion* 11.4 = Philist., *FGrHist* 566T5c: Philistus is called back from exile as “counterpoise” (ἀντίταγμα) against Plato and his followers.

⁸² Plu. *Dion* 35–6, quotation 36.3 = Philist., *FGrHist* 566F23a (transl. Perrin [1916] 79); see also Plu. *Pel.* 34.1 = Philist., *FGrHist* 566F40b: Plutarch here criticizes Philistus' account of the funeral of Dionysius I.

In this very passage he also calls the same Ephorus, who is presented in *De Herodoti malignitate* as a positive example, crazy, because of his praise for Philistus.⁸³

The reasoning in the introduction to *De Herodoti malignitate* is thus highly artificial and full of “evidence” that does not stand up to close examination. Plutarch picks out single elements and episodes from the works of historians that he regards as supporting his argument. His assessments often contradict statements in his other works; the examples are taken out of their contexts and are thus sometimes misleading. In addition, Plutarch himself, in his other works, is guilty of the same things he denounces here. His only aim in the preface to *De Herodoti malignitate* is to create artificial categories of malicious behavior with the help of the dubious examples mentioned above in order to be able to run down Herodotus in the main section of his work.

It is in this context that the negative comments on Aristoxenus are found, which leads to the following conclusions:

1) We have a remarkable situation, where what Theon says corresponds, with the exception of what he asserts about Herodotus, to what Plutarch otherwise holds in his works and to what seems to have been his personal opinion and the *communis opinio* in his circle. So Theon is only to a limited extent Plutarch’s mouthpiece. He is rather the embodiment of an orthodox Academic of Plutarch’s circle. This is the reason for the many correspondences with Plutarch’s other works. What sets Plutarch apart from his friends is his strong local patriotism and, as a result, his strange hatred of Herodotus. This negative assessment of Herodotus seems to have been an isolated position within the group, so that Plutarch could have his friend Theon include this historian among the exemplary authors in a literary dialogue. I do not see any good reason why the Academic Theon should have included Herodotus and Aristoxenus among the exemplary authors unless they had a good reputation and were generally appreciated by Academics.

2) Plutarch’s other works do not reveal a hostile attitude towards Aristoxenus, and Aristoxenus’ inclusion among the examples of malignity (κακοήθεια) in *De Herodoti malignitate* is part of an artificial line of argument. The pamphlet thus just shows that it was possible, if necessary, to exhibit a hostile attitude toward part of Aristoxenus’

⁸³ Plu. *Dion* 36.3 = Ephor. *FGrHist* 70F220.

Life of Socrates within the context of historiographical polemics, but it does not show that Aristoxenus was really malicious nor that Plutarch personally thought he was. Plutarch's criticism of Aristoxenus should be taken as seriously as his praise of Philistus and his criticism of the comic poets.

3) With the exception of Theopompus, the examples of malignity (κακοήθεια) in the introduction of *De Herodoti malignitate* refer to single passages in the works of historians. Even if, therefore, this testimony were trustworthy, this would not mean that Plutarch thought that Aristoxenus' *Life of Socrates* was, as a whole, characterized by malignity, but only the passage in which that character trait of Socrates is described.

4) It is furthermore important to see that, according to Plutarch, praise and blame were mixed in Aristoxenus' *Life of Socrates*. This fundamental statement is surely correct and crucial for our understanding of the work. The reason that Plutarch gives for it, however, is a consequence of his own argument in *De Herodoti malignitate* and a misinterpretation of the evidence, as is the case with many of his assessments of other historians in the context.

With one exception, I have now completed the survey of the external evidence for Aristoxenus' reputation as a biographer. The exception, i.e., the allegation of being hostile (δυσμενής) toward Socrates that we find in the *History of Philosophy* of the Neo-Platonist Porphyry, will be discussed later in detail. For now, it is sufficient to observe that the external evidence shows that positive evaluations of Aristoxenus as an author prevailed in antiquity and that he did not have the general reputation of being biased or even malicious.⁸⁴

3. Internal Evidence

The Life of Socrates

In what follows, I will take a closer look at a series of fragments from Aristoxenus' biographies in order to reevaluate the way he worked. I

⁸⁴ Von Mess (1916) 85 is thus not right when he states: "Auch das Altertum ist daher bei aller hohen Einschätzung seiner [scil. Aristoxenus'] grundlegenden Forschungen ziemlich einig in der abfälligen Beurteilung seines Charakters und seiner Kritik."

will compare the outcome with the methods used by other early Hellenistic biographers. What I will present here are still the preliminary findings of a commentary on the historical fragments of Aristoxenus that I am currently writing for *Fragmente der griechischen Historiker Continued*. These results reflect how far my work has proceeded up to this point. This means that most of my examples come from the *Life of Socrates*, some from the *Life of Plato*, and only very few from the *Life of Pythagoras* or from other works. This imbalance may be excused by the fact that the *Life of Socrates*, in particular, is highly significant for an appraisal of Aristoxenus and that by analyzing its fragments, we can get a good picture of how Aristoxenus worked. As mentioned above, modern scholarship has mostly agreed with Plutarch's and Porphyry's criticism, because it could not do much with a tradition that characterized Socrates as an "irascible sex addict," according to the usual interpretation of the text, and that contradicts completely the glorification of Socrates that prevails in modern accounts as a result of the Socrates legend created by Socratic philosophers.

When I started working on the fragments of the *Life of Socrates*, I quickly realized that all existing collections of fragments are unsuitable for the purpose of getting a clear picture of the work's content.⁸⁵ I base my judgment mainly upon the following considerations:

1) Cyril in *Contra Iulianum* and Theodoret in *Graecarum affectionum curatio*, each quote the same two passages from Porphyry's *History of Philosophy*, where the latter relies on Aristoxenus' *Life of Socrates*. These are our most substantial and most significant fragments of this work of Aristoxenus. In modern collections of Aristoxenus, these passages are usually broken into individual parts, which makes it difficult, sometimes even impossible, to follow Aristoxenus' argument.

2) Fragments are often not printed with sufficient context, a shortcoming that has already become obvious in the discussion of the two testimonia in Plutarch. At times, only the context or the words by which the source authors recapitulate the contents of the Aristoxenus fragments make their specific meaning clear.

⁸⁵ I.e., Müller (1848) fr. 25–31; Wehrli (²1967) fr. 51–60; Giannantoni (1990) 33–7 (= *SSR I B* 41–51) and Kaiser (2010).

3) The amount of text printed as fragments of Aristoxenus in modern collections is not always convincing and it can be shown that more text can be credited to him. By analyzing the quotation technique of our source authors, Cyril and Theodoret, some additional text can be attributed to Aristoxenus with a fair amount of certainty. In a recently published article, Andreas Patzer has shown that a comparison of the traditions in Porphyry with parallel sources reveals that, when Cyril and Theodoret refer to Porphyry for information on Socrates, that information, for the most part, goes back to Aristoxenus.⁸⁶

4) The standard text of Cyril's *Contra Iulianum* has been that of Migne, which is itself a reprint of Auberts' edition of 1638. Wolfram Kinzig from the University of Bonn has been working for some time now on a new edition of this important text, and he was kind enough to make all the relevant passages of his new critical text available to me in advance. With the help of the new text, some problems in constituting the text disappear, and it becomes obvious that, when we have a twofold transmission of the same passages from Aristoxenus in Cyril and Theodoret, the text transmitted by Cyril is, in most cases, superior to the tradition in Theodoret.⁸⁷

First of all, I would like to comment briefly on the transmission of the text. It has been generally assumed that Cyril and Theodoret used

⁸⁶ Patzer (2006) 38; on Aristoxenus' *Life of Socrates* see 35–55. I strongly disagree with Patzer's general interpretation of the work. The only passage where positive evidence for Aristoxenian authorship is hard to find is Theod. 12.65, on the quarrels between Xanthippe, Myrto and Socrates. Carl Huffman reminds me of the fact that this account "does assume the bigamy tradition, but Aristoxenus was not the only one to report that tradition. One might argue that the continuity with the preceding passages suggests that it also comes from Aristoxenus. The problem is that the continuity is broken at precisely this point, since Theodoret switches from the indirect discourse he was using to quote from Porphyry to direct discourse, which might suggest a change of source that Theodoret is now paraphrasing."

⁸⁷ Most important is his constitution of the text in Cyr. 6.34 (817c-d). His edition shows, furthermore, that the text in the older editions was based on manuscripts in which single words and parts of sentences are missing, which may give the impression that Theodoret's quotations from Porphyry/Aristoxenus are more accurate. The text found in the better manuscripts of Cyril is clearly superior to that in Theodoret, who manipulates Porphyry's text in order to make it fit his argument; this will be shown in greater detail in my forthcoming commentary for *FGrHist Continued*.

Porphyry's *History of Philosophy* directly.⁸⁸ But this assumption is far from certain. In both authors we find two blocks of quotations from Porphyry, which exhibit close similarity in both structure and content. Within the quotations, we find almost identical breaks. The introductions to the quotations, the places in the text of Porphyry where the quotations begin, and the wider context in which they appear are similar or identical. This all makes it very probable that both Christian authors are not quoting directly from Porphyry but via an intermediary source, where an already abbreviated version of Porphyry's account could be found.⁸⁹

At the same time, Porphyry probably did not use Aristoxenus' *Life of Socrates* directly either. This conclusion follows from the fact that he did not use Aristoxenus' *Life of Pythagoras* directly in his own *Life of Pythagoras*. There the line of transmission was probably: Aristoxenus → Neanthes of Cyzicus → Nicomachus of Gerasa →

⁸⁸ Grant (1964) 273–5; Évieux, in Burguière and Évieux (1985) 63–4 and Hammerstaedt (1996) 96 n. 102.

⁸⁹ Cyril and Theodoret introduce the quotation from Porphyry on the profession of Socrates singling him out among philosophers. Both speak formally of Σωφρονίσκου Σωκράτης and use almost identical words to describe him as the son of a stone cutter (Cyril: ἐξέφυ ... λιθοργοῦ δὲ πατρὸς; Theod.: ἐκ λιθοκόπου μὲν ἔφυ πατρός). After that, they both declare that the following account is taken from book 3 of Porphyry's *History of Philosophy*. Between the last two points, both authors use a superlative to describe the work of Socrates as a workman. According to Cyril he excelled in this profession; according to Theodoret he practiced it most of his life. I will argue in my commentary that Theodoret, as in other places, has manipulated his original, although keeping the structure of the original text.

It has been shown that Theodoret knew most works of Porphyry only through Eusebius (cf. Canivet [1957] 264–5). Canivet's arguments for the view that he knew the *History of Philosophy* directly are that 1) Theodoret could not find his quotations from it in Eusebius and that 2) Theodoret claims to have used it together with Aetius' *Placita* and Plutarch's (= ps.-Plutarch's) epitome of Aetius (Theod. 2.95; 4.31 and 5.16 = Porph. test. 195–7 Smith). But as Canivet (270–1), following Diels, himself admits, it is highly unlikely that Theodoret really made use of ps.-Plutarch's epitome. He only names the epitomator because he is an accepted authority, which is supposed to impress his pagan audience. This is all the more true for Porphyry, so that Theodoret may have cheated here as well. It can be, furthermore, excluded that Theodoret depends on Cyril or vice versa (the works were written around the same time), since both quote material from Porphyry's *Life of Socrates* not found in the other's work. I thus follow Roos (1886) 4, Beutler (1953) 287 and Jacoby on *FGrHist* 260F4–24 in postulating an intermediary source.

Porphyry.⁹⁰ Unfortunately this assumption cannot simply be transferred to Porphyry's and Aristoxenus' biographies of Socrates, because the Pythagorizing Middle Platonist Nicomachus is not known to have written a *Life of Socrates*. And, in the case of Neanthes, we do not have evidence for such a work either, although it is possible that he wrote one, if we take his interests in Socratics, such as Plato and Antisthenes, into account. We know that Neanthes quoted from Aristoxenus' *Life of Pythagoras* in his *Collection of Myths*, which included a biography of Pythagoras, and we also know that his works were a sort of handbook that assembled a wide range of different traditions (see below). This might suggest that they also played a role in the transmission of Aristoxenus' *Life of Socrates*, although we cannot tell for sure.

It is nevertheless reasonable to assume that Aristoxenus' *Life of Socrates* was used by most authors who have transmitted fragments of it only via intermediary sources, in which just the most spectacular passages were included, namely those also quoted by Cyril and Theodoret (i.e., by Porphyry). This is suggested by the fact that, with the exception of two quotations,⁹¹ all other quotations in ancient literature refer to those passages, so we can assume that they were notorious in antiquity. All of this does not prove that Porphyry had no direct knowledge of Aristoxenus, but the evidence points, as I think, in this direction.

If then, as I suggest, Porphyry did not use Aristoxenus' *Life of Socrates* directly but by means of an intermediary source, which probably contained an ambiguous selection of spectacular passages, it is perfectly possible that he got the wrong idea of its character and tendency, and that this was the reason why Porphyry classified it as hostile towards Socrates. What he read in these excerpts contradicted the presentation of Socrates in Plato's dialogues, which will have been an additional reason for the Neo-Platonist to consider Aristoxenus as an enemy of Socrates. But even if he still had the complete text at his disposal, he could have wrongly come to such a conclusion, since it seems to have contained a substantial amount of information that contradicted the common Academic view of Socrates. If Aristoxenus

⁹⁰ See e.g., Burkert (1972) 98–102; Radicke (1999) 124–5 (on *FGrHist* 1063) argues that the source of Nicomachus is Aristoxenus or Hippobotus; cf. Schorn (2007) 136–7.

⁹¹ Fr. 53 Wehrli = Eus. *PE* 11.3.6–9 = Giannantoni (1990) 34 (= *SSR* I B 43) = Aristocl. fr. 1 p. 30–4 Heiland and fr. 60 Wehrli = Schol. Plat. Ap. 7 ad 18b3 Cufalo = Giannantoni (1990) 37 (= *SSR* I B 51).

endorsed this tradition or even did not oppose it, this could have been regarded as evidence for hostility as well. We can, therefore, conclude that Porphyry's testimony on the character of Aristoxenus' *Life of Socrates* is also of questionable value.

As I have mentioned above, the parallel tradition shows that almost everything reported by Porphyry about Socrates goes back to Aristoxenus, unless Porphyry explicitly refers to a different source.⁹² This means that Theodoret 1.27–9 transmits material from Aristoxenus and that in book 12 not only §61–5 but §61–8 go back to Aristoxenus as well as 4.2 = Porph. fr. 216 Smith.⁹³ In Cyril's *Contra Iulianum*, we find the Aristoxenus-tradition in addition in 7.11 (845a–b), although Cyril does not there refer to his source explicitly. As a rule, Theodoret and Cyril only state at the beginnings of their quotation blocks that Porphyry refers to Aristoxenus as a source (and they do not even do this in every instance), because it is of no importance to their own argument that Aristoxenus is ultimately the source of the information. They want to discredit Socrates and, in order to do so, they invoke against him the authority of Porphyry, the great enemy of the Christians, whose testimony cannot be challenged by their pagan audience. Therefore, they regularly write “Porphyry says” even where Porphyry names Aristoxenus as his source and although Porphyry, in an often overlooked programmatic statement, emphasizes that in his *Life of Socrates* he collects positive *and* negative traditions about the philosopher.⁹⁴ It is thus wrong to assume, as some scholars have, that Porphyry agrees with Aristoxenus.⁹⁵ In fact, somewhat later he characterizes Aristoxenus as hostile towards Socrates and thus as untrustworthy. The intention of the two Christian authors has also had a determining influence on the selection of the material that they quote from Porphyry. Von Mess has already rightly emphasized that they only chose highly negative information, so that we are likely to get a

⁹² Cf. Patzer (2006) 37–8; see von Mess (1916) 84–5 on the tendency.

⁹³ On the possible exception of 12.65 see n. 87.

⁹⁴ Cyril. *Adv. Iul.* 6.34 (817c — not in Wehrli): Τούτων δὲ οὕτω σαφηνισθέντων λέγωμεν περὶ Σωκράτους τὰ παρὰ τοῖς ἄλλοις μνήμης κατηξιωμένα τὰ μὲν πρὸς ἔπαινον αὐτοῦ καὶ ψόγον πολλαχῶς ὑπὸ τῶν λογίων ἀνδρῶν μεμυθευμένα ἐπ' ὀλίγον φυλοκρινούντες ...

⁹⁵ But thus Staab (2002) 112 and already in antiquity: Socrates *Hist. eccl.* 3.23.14 = Porph. fr. 210 Smith.

one-sided picture of Aristoxenus' *Life of Socrates*, given that most of the text has been preserved by them.⁹⁶

The main characteristic of Aristoxenus' method is that he collected mostly oral traditions in order to correct the idealized picture of Socrates created and propagated by the Socratics and especially by Plato.⁹⁷ This approach, also common in his other biographies, is similar to what his younger contemporary Neanthes of Cyzicus (* ca. 360/350; † after 274) did in his *On Famous Men* and in other works, which included, among other things, biographies of Pythagoras and the Pythagoreans, Empedocles, Plato, and perhaps Antisthenes.⁹⁸ In an effort to collect material for these works, Neanthes traveled around and collected literary and oral sources as well as local accounts that often had to do with visits Neanthes' heroes had paid to the various localities. In the case of Plato, he interviewed Philip of Opus about the last days of the philosopher's life.⁹⁹ He also approached the Cynic Philiscus of Aegina to collect information about Plato's childhood, and he learnt from him a story from Aegina about the meaning of Plato's name. In addition, the Cynic reported to him that Plato had once been sold as a slave on Aegina.¹⁰⁰ For the biographies of Pythagoras and the Pythagoreans, Neanthes used literary, archaeological (Empedocles' tomb) and oral sources of mostly Pythagorean origin.¹⁰¹ He was not only active as a biographer but also wrote historiographical works *stricto sensu* as well, a *Hellenica* and books on local history, and works that are usually classified as "antiquarian." In all these works he applied the methods of historiographical research.¹⁰² Characteristic

⁹⁶ Cf. von Mess (1916) 84–5 and 90.

⁹⁷ On the anti-Platonic, not anti-Socratic, character of the *Life of Socrates*, on Aristoxenus' goal of correcting idealizing tales and on his empirical approach, see already the short remarks by von Mess (1916) 82–4 and 98.

⁹⁸ On Neanthes as a biographer, see Schorn (2007). The following summarizes the results of this study; cf. also Schorn (forthcoming).

⁹⁹ Phld. *Ind. Acad.*, PHerc. 1021 col. III 39–V 19 (fr. not in *FGrHist* 84); there is a new text in Puglia (2005).

¹⁰⁰ *Ind. Acad.*, PHerc. 1021, col. II 38–V 19 p. 133–4 Dorandi (1991); the text printed as *FGrHist* 84F84b is based on an old and insufficient edition; there is a new text in Puglia (2006).

¹⁰¹ *FGrHist* 84F26–33. The biographical treatments of the Pythagoreans were not part of *On Famous Men* but of his *Collection of Myths According to Cities*.

¹⁰² *Hellenica*: *FGrHist* 84F1–3; *Yearbooks (of Cyzicus?)*: F5; *Collection of Myths According to Cities*: F6–12 and *On Mysteries*: F14–6.

of his method is that he quoted traditions and sources of all kinds (stating explicitly the names of the people from whom he received them), even those he did not consider to be correct, that he visited and inspected the places he wrote about in his works (i.e., the historiographical principle of autopsy applies), and that he showed great interest in chronological questions. As I have mentioned above, among the many sources he quoted were also Aristoxenus' works about Pythagoras. It becomes apparent that he was primarily interested in famous people about whom fantastic and idealizing biographical accounts already existed. He considered it his duty to correct these traditions through his fieldwork and to reconstruct the historical truth.

A similar approach can also be discerned in the case of other early biographers. I am thinking of Antigonus of Carystus (* ca. 290; biographies written after 225) and of the often-criticized Chamaeleon of Heracleia (* hardly before 350; † after 281). In his old age, Antigonus wrote down his personal recollections of his encounters with famous philosophers in his youth.¹⁰³ He supplemented these notes with literary and oral sources to produce full-fledged biographies. He was not interested in the doctrines of these philosophers, used anecdotal material only on a small scale (here his biographies differ from those of Neanthes, who included such reports but often criticized them) and was especially interested in the everyday behavior of his heroes (as was Aristoxenus).

Chamaeleon has given his name to the so-called "method of Chamaeleon."¹⁰⁴ This method describes a literary technique that is considered to be very common in ancient literary biography. It involves the reconstruction of the biographies of poets (and other writers) in a fantastic way with the help of the poets' own works: Aeschylus was the first tragedian who introduced drunkards on stage, so he must have written poetry while he was drunk, to give just one example of this exegetical approach. But a closer look reveals that Chamaeleon

¹⁰³ On Antigonus as a biographer, see the introduction in Dorandi (1999) esp. LXXIV–LXXXI, on which the following is based; cf. also Wilamowitz (1881) esp. 127–9; a somewhat fuller sketch of Antigonus as a biographer is found in Schorn (forthcoming).

¹⁰⁴ On Chamaeleon, see Schorn (2008) and (2007 [publ. 2010]); cf. Schorn (forthcoming); I here repeat some results of these studies. On the "method of Chamaeleon" in Greek biography, see Arrighetti (1987) esp. 141–90.

himself practiced this method only to a very limited extent. He utilized the poems of Alcman, Pindar, and others only to reconstruct, quite successfully at times, the history of literature. When this method is used in his works to reconstruct the biographies of his heroes, it appears that he is usually reporting interpretations of others, especially local traditions. Thus, it can be shown that Neanthes and Chamaeleon often collect and report traditions, without accepting them uncritically.

I believe that Aristoxenus needs to be seen as one of these early biographers, who collected and corrected existing biographical data. But there is more to it. It is likely that his reports are sometimes more reliable than those of others in depicting the historical Socrates, although it needs to be emphasized that he focuses on Socrates as a person and not on Socrates as a philosopher.

In his *Life of Socrates*, Aristoxenus explicitly names his own father (and/or teacher) Spintharus, as a source who knew Socrates in person and thus could provide a first-hand account.¹⁰⁵ It has not yet been noted, so it seems, that Aristoxenus claims (in Cyril's better version of the text) to have learnt "the things about him" (τὰ περὶ αὐτοῦ) from Spintharus, which could mean that *everything* he reports about Socrates goes back to Spintharus or at least everything until he mentions a new source. Spintharus is certainly his source for his account of Socrates' power of persuasion, of his occasional irascibility, and probably also of his strong sex drive, including the stories about Socrates' "bigamy" with Myrto and Xanthippe and his intercourse with prostitutes.¹⁰⁶ At the end of this passage (i.e., at the end of §65 in Theodoret's text or even at the end of §64 as Carl Huffman suggests¹⁰⁷), the account based on Spintharus seems to come to an end. A report about Socrates as a dissipated young man follows: Socrates did not obey his father, did not want to work in his father's workshop, and, at the age of 17, started a sexual relationship with the philosopher Archelaus, with whom he stayed for many years and who converted

¹⁰⁵ Cyr. *Adv. Iul.* 6.3 (781d–784a) = fr. 54a Wehrli = Porph., *FGrHist* 260F10 = fr. 211 Smith: λέγει δὲ ὁ Ἀριστοῦξενος ἀφηγούμενος τὸν βίον τοῦ Σωκράτους ἀκηροῦναι Σπινθάρου τὰ περὶ αὐτοῦ, ὃς ἦν εἰς τῶν τούτῳ ἐντυχόντων; cf. von Mess (1916) 90.

¹⁰⁶ For a detailed exposition showing that these reports go back to Spintharus, see my forthcoming commentary.

¹⁰⁷ See above, n. 86.

Socrates to philosophy. Archelaus' instruction made Socrates stop living a dissolute life and lead the life of a philosopher instead. If Theod. 4.2 = Porph. fr. 216 Smith reflects the Aristoxenus tradition, as I think it does, Aristoxenus claimed that the education by Archelaus enabled Socrates to eradicate (ἀφανίσαι) the character trait of licentiousness (ἀκολασία), a fact that is swept under the carpet here by Theodoret, in order to present Socrates as negatively as possible.¹⁰⁸ For this story, as it seems, Aristoxenus referred to anonymous, probably oral sources (ἐλέγετο/φασιν), but this vagueness may also be a consequence of the fact that the text here is only what is left of Aristoxenus' text after the process of repeated epitomization. Aristoxenus may very well have named his sources. Be that as it may, this report cannot rely on Spintharus as an eyewitness, as is the case with what Aristoxenus reports about Socrates' character before. Aristoxenus was born around 376–3, which means that his father/teacher could not have known Socrates as a young man, because the latter was born in 469. Therefore, if Aristoxenus really derives everything he reports about Socrates from Spintharus, he must have told him about these events from hearsay. But most likely, this part of the report has nothing to do with Spintharus. Also, where Aristoxenus speaks about Socrates spending his time in the Agora — with which fr. 59 Wehrli seems to be connected — he reveals that what he reports is that for which (some) people blamed Socrates.¹⁰⁹

The strange characterization of Socrates proposed in the tradition going back to Spintharus can be better understood, if we read it within the context of other parallel sources. Regarding the so-called “bigamy,” it needs to be emphasized that Aristotle already wrote about it in his dialogue *On Noble Birth*.¹¹⁰ A passage in the *Rhetoric* (2 1390b28–31) shows that Aristotle considered this a historical fact. Otherwise, he could not have named the sons of Socrates as examples of “well-born”

¹⁰⁸ Theod. 4.2 = Porph. fr. 216 Smith: Καὶ γὰρ τὸν Σωκράτην τὸν Σωφρονίσκου φησὶν ὁ Πορφύριος εἰς ἀκολασίαν, ἥνικα νέος ἦν, ἀποκλίναντα, σπουδῇ καὶ διδαχῇ τούτους μὲν ἀφανίσαι τοὺς τύπους, τοὺς δὲ τῆς φιλοσοφίας ἐκμάξασθαι.

¹⁰⁹ On this story and its tendency, see below.

¹¹⁰ I here follow Labarbe (1998) and Schorn (2004) 392–8. The most important sources are: Cic. *Fat.* 10 (the Latin quotations in the following derive from this work); *Tusc.* 4.80; Alex. Aphr. *Fat.* 6 and [Plu.] *Περὶ ἀσκήσεως* p. 527 Bücheler in Gildemeister and Bücheler (1872) = Giannantoni (1990) 62–3 (= *SSR* I C 49).

(εὐγενεῖς), who degenerated. This is only possible if he regarded them to be the children of the noble Myrto, not the humble Xanthippe. We know that Aristotle also drew on oral Athenian traditions about Socrates, which means that it is unnecessary to assume that *On Noble Birth* reports the fiction of a lost Socratic dialogue, as has been suggested.¹¹¹ As I have already pointed out, the passage in the *Rhetoric* shows that he regarded Myrto as a historical person. Furthermore, he makes it clear elsewhere that he was aware of the fictional character of the Socratic dialogues.¹¹² This means that there is no reason to believe that he fell for such a story in a Socratic dialogue that is lost today.¹¹³ Just like many other interpreters, I thus believe that, at the end of his life, there were really two women in Socrates' life, Myrto as a legitimate spouse and Xanthippe as a concubine, exactly as Aristoxenus reports.¹¹⁴ This was *de iure* perfectly possible, just as were the occasional relations with prostitutes, which Aristoxenus also reports. It cannot be denied that, for a philosopher in the classical sense, such behavior was not appropriate. What then was Aristoxenus' intention?

In a recent article Klaus Döring has taken a crucial step for a correct understanding of Aristoxenus' characterization of Socrates.¹¹⁵ He has connected Aristoxenus' account with three other texts, the aforementioned *On Noble Birth*, the dialogue *Zopyrus* written by the Socratic Phaedo, and a passage in the ps.-Aristotelian *Problemata physica* (30.1 953a10–955a40), where the problem of melancholia is discussed. In the *Zopyrus* Socrates meets the Persian physiognomist Zopyrus, who concludes from Socrates' appearance that he is stupid (*stultus*), dim-witted (*bardus*), and devoted to women (*mulierosus*).¹¹⁶

¹¹¹ E.g., by Laurenti (1987) II 781–821; contra: Labarbe (1998); cf. Döring (1998) 147–8; Schorn (2004) 392–8.

¹¹² Cf. Deman (1942) 119–20.

¹¹³ As proposed by Maier (1913) 81 n. 1.

¹¹⁴ Fitton (1970); Bicknell (1974); Cromei (1980); Ogden (1996) and Labarbe (1998); cf. also Döring (1998) 147–8; Schorn (2004) 394; differently von Mess (1916) 92–6; the Myrto-Xanthippe-story serves for him as an example that Aristoxenus was not always critical enough. He regards Aristoxenus' interpretation a "Fehlgriff," but nevertheless speaks of his "Wahrheitsliebe" (95).

¹¹⁵ Döring (2007). The following interpretation largely depends on Döring's study. Patzer (2006) 43–7 interprets the same texts as Döring, but with very different conclusions.

¹¹⁶ On the dialogue see Rossetti (1980); von Mess (1916) 89 with n. 2 already uses

The people in attendance start laughing or show some indignation. Socrates himself agrees with this characterization and explains that, by nature, he was indeed of such a character. However, by means of will (*voluntas*), study (*studium*), and discipline (*disciplina*), he has been able to extirpate these characteristics.

The passage in *Problemata physica* also serves to illustrate this. As Van der Eijk has shown, it is consistent with Aristotle's theory of melancholia and probably contains Aristotelian doctrine.¹¹⁷ The anonymous author there discusses the question: "Why is it that all those who have become eminent in philosophy or politics or poetry or the arts are melancholics?" He thereupon names Socrates among the celebrities who were melancholics by nature (and not because they have, e.g., drunk wine). These men, the author explains, have an excess of black bile in their bodies, which has mostly negative consequences. Black bile can become warm or cold. If it becomes very cold, those with an excess of black bile become dull and stupid (νοθοὶ καὶ μωροί); if it becomes warm, they become frenzied (μανικοί), naturally clever (εὐφρεῖς), amorous (ἐρωτικοί), and easily moved to anger and desire (εὐκίνητοι πρὸς τοὺς θυμοὺς καὶ τὰς ἐπιθυμίας); some of them become quite loquacious (λάλοι μᾶλλον). A positive effect occurs if the heat of the bile has a moderate temperature: "Those in whom the excessive heat dies down to a mean temperature are atrabilious, but they are cleverer and less eccentric and in many respects superior to others either in mental accomplishments or in the arts or in public life."¹¹⁸ The author of *Problemata* describes the strong sexual drive of melancholics elsewhere, and Aristotle also mentions the latter's intemperance (ἀκολασία).¹¹⁹ Döring makes it seem very probable that Socrates was also depicted as a melancholic in *On Noble Birth* and that Aristotle did not just discuss whether and how the good qualities of a well-born (εὐγενής) person could be passed on to his or her children but also whether and how melancholy was passed on. Therefore,

the Zopyrus story in order to show that Socrates had a "genialische Krafnatur" and that he was not a "Mustermensch" (89 n. 2). But he did not realize that the Socratic Phaedo was the source of the account.

¹¹⁷ Van der Eijk (1990) esp. 61–72.

¹¹⁸ [Arist.] *Pr.* 954a39–b4; trans. Forster (1984).

¹¹⁹ [Arist.] *Pr.* 953b32–3; 954a32 and 880a30–4; Arist. *EN* 7 1150b25–8 and 1154b11–5; cf. Döring (2007) 264.

it may be that it was not just the Peripatetic author of *Problemata* who regarded Socrates as a melancholic but also Aristotle himself, and that the characteristics of a melancholic that we find in *Problemata* also shaped the portrayal of Socrates in *On Noble Birth*. The idea of Socrates as a melancholic in *Problemata* implies that he was, according to the author's theory, in a permanent state of anomaly. Even if the temperature of his black bile had a moderate temperature, he was only "cleverer and less eccentric" than those melancholics whose black bile was too hot and who, as a consequence, were frenzied, amorous, and easily moved to anger and desire. The comparatives indicate that according to the author even men like Socrates had, to some extent, shortcomings. Moreover, the author of *Problemata* stresses the fact that the temperature of the black bile often varied. This means that we have to assume that, at different times, the melancholic was characterized by all the qualities mentioned before for those whose black bile had a warm, moderate, or cold temperature.

It is obvious that Aristoxenus has not invented his characterization of Socrates as, for example, Patzer maintains. I do not find any reason to assume that Aristoxenus did not acquire his information from various oral sources, as he claims. But this means that we have, as it seems, independent sources that portray Socrates as a problematic character: 1) Socrates' direct disciple Phaedo, who affirms that Socrates had himself perfectly under control with the help of philosophy. This means, however, that Phaedo must have assumed that this had not been the case *before* Socrates became a philosopher. 2) The Anonymi in Aristoxenus, who report that Socrates was an unruly young man who was made a philosopher by Archelaus (§ 66–8 in Theodoret's text). 3) Spintharus, who claims that even as an adult and as a philosopher Socrates could not always control his feelings. 4) Aristotle, according to whom Socrates had a sexual relationship with two women at the same time (and who probably regarded Socrates as a melancholic with all its consequences). 5) The Peripatetic author of *Problemata*, who similarly regards Socrates as a melancholic. I am inclined to see as the reason for this concordance that they all derived from the personality and life of the historical Socrates and to conclude that he really had — at least sometimes — a difficult character. The parallel tradition, therefore, basically confirms Aristoxenus' account.

In other fragments, too, Aristoxenus has been wrongly suspected of slandering Socrates. I limit myself to a few examples. In Theodoret 12.66–7, which goes back to Aristoxenus, as is shown by fr. 52a-b Wehrli,¹²⁰ it is reported that Socrates was already about 17 years old when he became the beloved (ἐρώμενος) of Archelaus and that he stayed with him for many years. Patzer assumes that Socrates was also — and correctly — presented as Archelaus' ἐρώμενος by Ion of Chios, since Aristoxenus could not have invented such a story out of nothing, if he wanted it to be plausible. But Patzer goes further and argues that Aristoxenus added to the harmless story of Socrates being Archelaus' beloved as a boy the details that Socrates was already 17 years old at the beginning of this relationship and that he lived together with Archelaus for many years. Since after the age of 17 such relationships were no longer permitted, Aristoxenus thus turned Socrates into a practicing passive homosexual, which was not socially accepted. Patzer thus regards the story as highly derogatory.¹²¹

But regardless of when the sexual relationship started, it is crucial to note that the philosophical eros is regarded as absolutely positive in this account. Its result is a moral improvement of Socrates and, if 4.2 goes back to Aristoxenus, Archelaus' education made the tendency towards licentiousness disappear from Socrates' character. But even if one is not inclined to accept Aristoxenian paternity of that passage, the same is obviously presupposed in the statement in 12.67 according to which Socrates was made a philosopher by Archelaus. The point here is that he led a dissolute life *as a young man*, which is presented as the opposite of the philosophical way of life that is characteristic of Socrates in later years.

That the account was not intended to throw a negative light on Socrates is also shown by an interesting correspondence with the philosophy of the Socratic Antisthenes. This correspondence proves that the philosophical eros towards an older pupil, understood as implying not only a spiritual but also a sexual relationship, could be regarded as positive even by a Socratic philosopher. In a fragment of Antisthenes' *Herakles* we read:¹²² “to him (= Chiron) Herakles seems to have come

¹²⁰ See Patzer (2006) *passim*.

¹²¹ Patzer (2006) esp. 38–50; differently von Mess (1916) 92, who thinks of a merely intellectual relationship, which is hardly compatible with the Greek text.

¹²² [Eratosth.] *Cat.* 40 = Giannantoni (1990) 2.357 (= *SSR* V A 92.1–6): ἐφ' ὃν

out of desire and to have had intercourse with him in his cave, venerating Pan. He was the only Centaur he did not kill, but he was his disciple as the Socratic Antisthenes says in the *Herakles*.” Here too the disciple is a young man surely beyond the age of the usual beloved boy (ἐρώμενος), here too sex is part of the educational program and the first step on Herakles' path to becoming a sage.

The report by Ion of Chios that Socrates as a young man travelled to Samos with Archelaus is one of the few pieces of information on the life of Socrates that has been generally — and rightly — regarded as historical.¹²³ The least that can be said about the version Aristoxenus transmits, is that it is compatible with this report and that it gives a positive account of Socrates' personality development.

Theodoret 1.29 reports the Aristoxenus-tradition as is shown by fr. 55 Wehrli.¹²⁴ Here Socrates is described as “lacking talent in no respect” (πρὸς οὐδὲν μὲν ἀφυή) but “uneducated in every respect” (ἀπαιδευτον δὲ περὶ πάντα). He was not even able to read and write properly and when he read a text aloud he stuttered like a child. This too has been interpreted as calumny.¹²⁵ But since Socrates was “lacking talent in no respect” he obviously deliberately dismissed traditional education, considering it unnecessary for his philosophical life. He was nevertheless, as Spintharus emphasizes, one of the most convincing men he ever met, which seems to prove that Socrates was right in assuming that such an education was of no use for a philosopher. This is, to be sure, not the Socrates Plato and Xenophon present, but there is, again, a striking agreement with the philosophy of Antisthenes. According to this Socratic philosopher it was possible to become and to be a sage without being able to read or write and without rhetorical training.¹²⁶ Unfortunately this report appears only in

Ἡρακλῆς δοκεῖ ἐλθεῖν δι' ἔρωτα, ᾧ καὶ συνεῖναι ἐν τῷ ἄνθρωπῳ τιμῶν τὸν Πάνα. μόνον δὲ τῶν Κενταύρων οὐκ ἀνείλεν, ἀλλ' ἤκουεν αὐτοῦ, καθάπερ Ἀντισθένης φησὶν ὁ Σωκρατικὸς ἐν τῷ Ἡρακλεῖ.

¹²³ Ion *FGrHist* 392F9 = D. L. 2.23: Ἴων δὲ ὁ Χίος καὶ νέον ὄντα εἰς Σάμον σὺν Ἀρχελάφῃ ἀποδημήσαι; on the historicity see, e.g., Döring (1998) 146 and Patzer (2006) 10–6.

¹²⁴ Cf. Patzer (2006) 36.

¹²⁵ So Patzer (2006) 36.

¹²⁶ Giannantoni (1990) 2.382 (= *SSR* V A 161) = D. L. 6.103–4 and Stob. 2.31.76 = Giannantoni (1990) 2.386 (= *SSR* V A 173).

the doxographical tradition; it would be interesting to know whether Antisthenes characterized his Socrates in this way.

In fr. 59 Wehrli = D.L. 2.20, we read: φησι δ' αὐτὸν Ἀριστοξένος ὁ Σπινθάρου καὶ χρηματίσασθαι τιθέντα γοῦν τὸ βαλλόμενον κέρμα ἄθροίζειν· εἰτ' ἀναλώσαντα πάλιν τιθέναι. The meaning of this sentence, which is obviously a highly condensed résumé of an account that was originally much longer,¹²⁷ has been much discussed. I understand it to mean: “Aristoxenus, the son of Spintharus, says that he (scil. Socrates) also engaged in financial transactions. He would at all events deposit money in a bank, collect the little sums accruing, and then, when he had spent them, deposit the money again.”¹²⁸ Philosophers involved in money transactions were a favorite target of polemics in ancient biography, and making a living in such a way is surely not compatible with aristocratic ethics. Here it is decisive that Aristoxenus speaks of “small coins” (κέρμα). It is thus assumed by Aristoxenus (or by the tradition he reports) that Socrates had a certain sum of money at his disposal, which he cannot have considered to be very large. Although Socrates had this modest fortune, he was content with living from the scarce interest it yielded. He did not even invest it continuously, but only when he had spent the interest of his last investment. He is thus depicted as a man who voluntarily restricts himself and who avoids any income that is above what is necessary. Although Socrates is also depicted by Plato and Xenophon as poor and modest in his needs, it is again Antisthenes who presents being content to have only what is absolutely necessary as something good.¹²⁹

¹²⁷ Theod. 12.68 also goes back to this account.

¹²⁸ Cf. M. Narcy in Goulet-Cazé (1999) 230: “Aristoxène, fils de Spintharus, dit qu’il fit aussi des opérations financières. Par exemple, il faisait un placement, accumulait la petite somme qu’il en tirait, puis, quand il l’avait dépensée, faisait un nouveau placement.” Differently, e.g., von Mess (1916) 96–8, who nevertheless does not see here anti-Socratic polemics; his interpretation of κέρμα as “small sums of money” is, however, correct.

¹²⁹ “Antisthenes” in Xenophon’s *Symposium*: Xen. *Smp.* 3.8 = Giannantoni (1990) 2.351 (= *SSR* V A 81); *Smp.* 4.34–44 = Giannantoni (1990) 2.351 (= *SSR* V A 82) and *Smp.* 4.61–4 = Giannantoni (1990) 2.323 (= *SSR* V A 13.1–24); cf. in addition: D. L. 6.2 = Giannantoni (1990) 2.322 (= *SSR* V A 12.5–6); Plu. *Quaest. conv.* 2.1.7 (623e) = Giannantoni (1990) 2.417 (= *SSR* V B 20) and Epict. *Ench.* 3.24.67–9 = Giannantoni (1990) 2.418 (= *SSR* V B 22).

One last point on the *Life of Socrates*: As I have pointed out above, only two fragments do not belong to the thematic blocks that we find in Porphyry. In the first one (fr. 60 Wehrli), which deals with the prosecution of the philosopher, it cannot be established for sure what Aristoxenus reported about the events. The second one, however, which deals with Socrates' instruction by an Indian (fr. 53 Wehrli), gives a positive picture of Socrates.

Aristoxenus presents himself in the *Life of Socrates* as a serious researcher, who tries to correct the legendary and idealizing picture created by Socratics like Plato and Xenophon by resorting to independent oral sources. His Socrates is much more realistic than the artificial figure found in the works of these Socratics,¹³⁰ and the example of the tradition on Socrates' strong sexual drive shows that Aristoxenus may sometimes be closer to the truth than is usually assumed. The correspondences of some elements in his picture of Socrates with some features of Antisthenes' doctrine are puzzling and deserve further research.¹³¹ To be sure Aristoxenus' Socrates does not correspond to the ideal of the sage Antisthenes projected on the mythical Herakles and the semi-legendary Cyrus the Great. His sage is an epitome of self-control, which is incompatible with the Socrates sometimes not in control of himself, whom we find in Spintharus' account. But we do not know whether Antisthenes' Socrates was stylized as a sage. We know, however, that what we find in the doxographical tradition as Antisthenes' doctrines was, at least in part, put in the mouth of the Socrates of his dialogues.¹³² So is the Socrates whom Aristoxenus presents identical with the Socrates of Antisthenes? Aristoxenus seem to draw on traditions found in oral sources, such as Spintharus and others. This agrees with what we know about Aristoxenus' working method in his other biographies and with what can be seen in the works of other

¹³⁰ I am glad to see that I am here in agreement with the Carl Huffman's assessment of the *Life of Socrates*. This view is also held by von Mess (1916) 82–4.

¹³¹ There is at least one more correspondence than the ones mentioned above. Antisthenes advocates the use of prostitutes in order to satisfy one's sexual needs (D. L. 6.4 = Giannantoni (1990) 2.345 [= SSR V A 60]). This is precisely what Socrates does as a consequence of his strong sex drive. Carl Huffman here proposes a different interpretation of Aristoxenus' text.

¹³² There are hints that the *Herakles* was a dialogue about the hero with Socrates as one of the interlocutors. I have a forthcoming paper on Antisthenes' *Herakles*.

early biographers. It is possible that some of the anonymous traditions that he reports were originally not anonymous and that the names of the sources have been replaced by more general references like “they say” (φασι) and “it was said” (ἐλέγετο) in the course of repeated epitomization and quotation. If, however, the name of the source was originally Antisthenes, this is quite unlikely. It is hard to imagine why Porphyry, Theodoret or any other author should have eliminated a prominent name such as that of the Socratic. It is also hard to imagine why Aristoxenus should have resorted to deception and have presented material that he had found in Antisthenes as traditions he had gotten from oral sources. The assumption that he introduced as oral traditions what he read in Antisthenes about Socrates or, even worse, that he falsely projected elements of the doctrine of Antisthenes on Socrates, would be contrary to everything we can deduce from the way he worked in his biographies. Of course, we cannot rule out that some of his sources were influenced by the picture Antisthenes had drawn of Socrates and that Aristoxenus, unwittingly, regarded these reports as first-hand testimonies. In this case his testimony would not be independent from Antisthenes, and we would have to conclude that he just reproduced the construction of Socrates (*Sokratesdichtung*) of another Socratic philosopher. But if we take the references to *various* sources seriously, it is hard to believe that these *different* sources were all influenced by Antisthenes’ account. As shown above, there is no case where Aristoxenus can be shown to have falsified a report. Where his reports can be compared to other sources that cannot be regarded as malicious, they agree or are compatible with them. If we are willing to accept that Aristoxenus was an honest reporter of what he had heard about Socrates, is it not then possible to regard the correspondences between him and Antisthenes as independent testimonies reflecting the personality of the great philosopher? Aristoxenus, as a student of Aristotle, must have been familiar with Antisthenes’ works and thus with Antisthenes’ Socrates. My impression is that he did not trust Antisthenes’ Socratic dialogues, since he did not fall for the Socrates legend of other Socratics. And he was right in doing so. Instead, he did fieldwork among eyewitnesses and collected data from hearsay reports. It seems that by doing so, he found confirmed at least part of what he read in Antisthenes. May this not give us a glimpse of the historical Socrates?

What can be excluded is that Aristoxenus was a Pythagorean zealot who slandered Socrates in order to show the superiority of Pythagorean doctrine. His picture of Socrates was not anti-Socratic, but surely anti-Platonic.¹³³ He presented Socrates as a man with great talents and with weaknesses, which, since they were caused by his nature, excused his behavior to some extent. In order to correct the fictional Socrates of the Socratics, he collected non-literary evidence, which means in this case oral traditions. This is exactly what characterizes the biographies of Neanthes: portrayals of historical persons, who had been idealized by others, as normal human beings on the basis of material independent of these idealizing sources. Neanthes often just presented stories that contradicted the idealized presentations, informing the reader about the sources of these stories. We do not know whether Aristoxenus proceeded in the same way. At all events, the fragments give the impression that he presented a coherent picture of Socrates. But this may be a result of the fact that in later times it was precisely the apparently negative aspects of Aristoxenus' account and not those that agreed with other accounts of Socrates that attracted the interest of authors and that were accordingly quoted. Aristoxenus' work was surely not malicious, but it was so contradictory to the idealized Socrates of many Socratics that Platonists like Plutarch and Porphyry could claim that it was hostile to the Athenian.

The Life of Plato

The fragments preserved from the *Life of Plato* confirm this appraisal of the *Life of Socrates*. But here the evidence is much less conclusive, since we often possess only very short fragments, and it is likely that through the process of repeated epitomization much of the original content has been lost. This biography too has usually been regarded as hostile to its "hero," but positive aspects can be found here as well. Thus, we read in fr. 61 Wehrli that Plato served Athens well in the military. On the other hand, fr. 67 Wehrli presents Plato as plagiarizing from Protagoras. To accuse someone of plagiarism was so common in antiquity as to be almost normal and even Aristoxenus himself (fr. 68 Wehrli) was listed along with Plato, Aristotle, Speusippus and Xenocrates among those who plagiarized Pythagorean doctrine, "as

¹³³ See von Mess (1916) 98.

the Pythagoreans claim,” which shows the source of the accusation. The charge of plagiarism has also been thought to be behind fr. 131 Wehrli from the *Historika hypomnemata*, where it is said that Plato wanted to burn all the writings of Democritus that he could get hold of. Some interpreters think that he wanted to conceal that he had plagiarized them,¹³⁴ whereas others assume that jealousy was the motive behind this act or that he wanted to hush the voice of the materialist.¹³⁵ Be that as it may, the identity of the heroes who prevented Plato from doing so, the Pythagoreans Amyclas and Clinias, makes it probable that this story too arose as part of Pythagorean polemics. Fragments 67 and 131 Wehrli have been transmitted by Diogenes Laertius, who usually condenses testimonia to their “basic message.” Thus, we cannot be sure that Aristoxenus endorsed this tradition. He may just have reported the point of view of others. It is one of the major problems in dealing with Hellenistic biography, that what is presented as the opinion of biographer X is often something he just reported without endorsing it.¹³⁶

Only one fragment is more extensive and it shows that Aristoxenus’ approach here corresponds to the procedure in his *Life of Socrates* (fr. 32/63 Wehrli = Plu. *Tim.* 15.5). It indicates that Aristoxenus visited Dionysius II, while the latter was living in exile in Corinth, and that he interviewed him about his relationship with Plato: “Further, when Aristoxenus the musician and certain others inquired what his complaint against Plato was and what its origin, he told them that of the many ills with which tyranny abounded there was none so great as this, that no one of those reputed to be friends speaks frankly with the tyrant; for indeed it was by such friends that he himself had been deprived of Plato’s good will.”¹³⁷ It is noteworthy that neither Plato nor Dionysius is shown in an unfavorable light: Plato was benevolent and the tyrant regretted what had happened. This fragment thus not only shows that Aristoxenus went to Corinth but also that his opinion of Plato was

¹³⁴ So Wehrli (1^{–2}1967–78) 2.86.

¹³⁵ Envy: Riginos (1976) 166 (= anecdote no. 123). In private correspondence Carl Huffman points out that Plato’s motive could have been that “Democritus was a materialist who denied the priority of soul to body for which Plato argues,” which is perfectly possible.

¹³⁶ I have tried to show this in Schepens & Schorn (2010) 418–30.

¹³⁷ Trans. Perrin (1916) 6.295–27.

not one-sidedly negative. Aristoxenus also provides evidence about Plato in the *Elementa Harmonica*, where he gives a report about Plato's lecture *On the Good* on the basis of "what Aristotle used to tell."¹³⁸ In the case of Plato, too, there existed an encomiastic tradition propagated by his first disciples and by later Academics. Obviously — and rightly — Aristoxenus did not trust this tradition in writing his *Life of Plato* and instead tried to get back to the historical person by collecting independent testimonies, including eyewitness reports. This shall suffice to illustrate Aristoxenus' approach in his biographies of the two philosophers, whom he did not know in person but for whom an oral tradition existed.

The Life of Telestes

The biography of Telestes, a man whom Aristoxenus knew personally, is a special case. We also find such cases among the biographies of Antigonus of Carystus. Unfortunately only a single fragment (fr. 117 Wehrli) has been preserved from this *Life*, which makes comparison impossible.

The Life of Pythagoras, the biographies of Pythagoreans and other works

Finally, here are a few cursory remarks on the *Life of Pythagoras* and the lives of other Pythagoreans. *Prima facie* the impression one gets from the lives discussed above is confirmed in the case of these lives. Indeed, some aspects of Aristoxenus' method can be identified even more clearly in these texts. The portrayal of the Pythagoreans was generally positive, but not one-sidedly encomiastic. As Carl Huffman points out in his paper, the Pythagorean Archytas was described as prone to anger, which is unlikely to be complimentary.¹³⁹ In these *Lives*, Aristoxenus seems to rely mostly on oral reports of later Pythagoreans and on local traditions. Among his sources we find Xenophilus and other Pythagoreans,¹⁴⁰ Spintharus again¹⁴¹ and Dionysius II again,¹⁴²

¹³⁸ Aristox. *Harm.* 39–40 Da Rios.

¹³⁹ Cf. von Mess (1916) 84 n. 1, who states that the *Life of Archytas* seems to have been free of legendary traits.

¹⁴⁰ Fr. 18, 25 and 43.

¹⁴¹ Fr. 30 = 49.

¹⁴² Fr. 31; cf. Fr. 50.

who is even said to have told him *often* about Phintias and Damon, which suggests a closer relationship between Aristoxenus and Dionysius. Other reports seem to go back to local traditions in his hometown Tarentum.¹⁴³

His chronology of the anti-Pythagorean revolt seems to be coherent. His mostly positive representation of the Pythagoreans is due, on the one hand, to his informants and, on the other hand, to the authors who quote his works and who are pro-Pythagorean for the most part. But it is important to note that he did not exclusively consult people expected to be pro-Pythagorean. Among his informants is Dionysius II, whose relationship to the Pythagoreans was not always smooth.

Fragments from other works show that Aristoxenus also confronted the problem of the authenticity of literary works and that he studied the customs and traditions of Mantinea.¹⁴⁴ Fr. 44 Wehrli proves that he also used archaeological sources and that he collected evidence on journeys, in this case in order to identify the place where the Spartan Lycurgus had died.

4. Conclusion

His biographical and “antiquarian” works show Aristoxenus as a historian, who carefully collected information, traveled to acquire it and named his sources accurately. By doing so, he enabled his readers to assess the origin and often also the credibility of a piece of information. Methodologically and in the way in which he presented the results of his research to his audience, Aristoxenus’ biographies bear similarities to those of his younger contemporary Neanthes of Cyzicus. I have classified the latter’s biographies as *periegetic*¹⁴⁵ and Aristoxenus’ biographies were also in a certain way *periegetic*, with the difference that Neanthes seems to have traveled much more than Aristoxenus. Another difference is that Neanthes also used literary traditions on a large scale. This shows him as a representative of a later generation of biographers, who were not yet bookish, but also not mere empiricists as Aristoxenus seems to have been.¹⁴⁶ Aristoxenus was a historian, not

¹⁴³ Fr. 47–8.

¹⁴⁴ See fr. 45 and fr. 45I Wehrli.

¹⁴⁵ Schorn (2007).

¹⁴⁶ As Andrew Barker pointed out to me in the discussion after my lecture, an

a philosophical zealot who praised one party and deprecated another. That the tendency of a historian is in some way determined by his origin and education is a matter of fact, especially in the case of historians in antiquity. It should not be denied, however, that Aristoxenus made an effort to uncover the truth, as has been rightly stressed by von Mess. The polarization that appears to be present in his works should be ascribed more to our sources than to Aristoxenus himself. Plutarch's characterization of Aristoxenus *Lives* as "history" (ιστορία) is, therefore, completely legitimate.

Suetonius calls Aristoxenus *longe omnium doctissimus*. That such an evaluation excludes a one-sided treatment has already been mentioned.¹⁴⁷ One reason for this praise may be that Suetonius recognized some similarities between the *Lives* of Aristoxenus and his own biographies. Suetonius tries to find out as much as he can about all possible aspects of the lives of the people whom he treats, and he does not pass over any source. He chronicles positive and negative facts and presents them largely without personal comments, leaving it to the readers to draw their own conclusions.¹⁴⁸ We do not have evidence that Aristoxenus used this form of presentation as well. He probably did not. But Suetonius is likely to have admired the abundance and breadth of traditions utilized in Aristoxenus' works. This appears to have been one of the reasons why, for him, Aristoxenus was the *longe omnium doctissimus* among Hellenistic biographers.¹⁴⁹

empirical approach such as is described above is also characteristic of Aristoxenus' musicological works.

¹⁴⁷ See above, pp. 183–4.

¹⁴⁸ On Suetonius' method see De Coninck (1978).

¹⁴⁹ This contribution is a result of the research project "Hellenistic biography: antiquarian literature, gossip or historiography? Collection of fragments with commentaries and syntheses within the framework of *Fragmente der Griechischen Historiker Continued*" financed by "Onderzoeksfonds K.U. Leuven / Research Fund K.U. Leuven." This project is affiliated with "LECTIO" (Leuven Centre for the Study of the Transmission of Texts and Ideas in Antiquity, the Middle Ages and the Renaissance).

8

Aristoxenus and the Pythagoreans

Leonid Zhmud

There are two main problems in the study of ancient Pythagoreanism, first, the elusive and contradictory figure of Pythagoras himself, and second, our sources. Pythagoras pretended to possess supernatural qualities and was, therefore, the kind of person who attracted legends, even if originally they were not connected with him. In contrast to Pythagoras, no historically known early Pythagorean is connected with anything supernatural, mystical, or superstitious in the reliable part of the tradition. The doctors Democedes and Alcmaeon, the Olympians Milo and Iccus, the botanist Menestor, the philosophers Hippo and Philolaus, and the mathematicians Hippiasus and Theodorus all appear in our sources to be as “normal” as they can possibly be. This discrepancy gave rise to a marked tendency in twentieth-century scholarship to isolate Pythagoras from the rest of the historically attested Pythagoreans, while encircling him with nameless devotees, who were strictly following what “he himself said” (αὐτὸς ἔφα). A now dominant two-stage model of the evolution of Pythagoreanism implies the transformation of a secret religious sect, founded by Pythagoras, into a scientific and philosophical school, of the Pythagorean “myth”

into the Pythagorean “*logos*.”¹ This brings the question of continuity and discontinuity in ancient Pythagoreanism into the foreground and makes Aristoxenus, its first historian and biographer, an indispensable witness for reconstructing its historical framework. Though not the first to write about Pythagoras and the Pythagoreans (there was much written on this subject in the Academy), and by no means an impartial and objective scholar, he was the first to give an overall historical picture of this movement from its birth to its death. Revealingly, he stressed continuity, not a radical shift, in the Pythagorean tradition, and thus stands against the now prevailing historiographical pattern. Aristoxenus’ works *On Pythagoras and His Associates* (Περὶ Πυθαγόρου καὶ τῶν γνωρίμων αὐτοῦ) and *On the Pythagorean Life* (Περὶ τοῦ Πυθαγορικοῦ βίου) portrayed the last Pythagoreans as Pythagoras’ students and followers, who led the way of life founded by him. Admittedly, his approach is often regarded as a rationalistic construction, which it to a great extent was. Still, there is much in favor of this particular construction, especially if we compare it with other available ones, including the idea of a progression “from myth to logos.”

In order to establish the historical links connecting Pythagoras with the Pythagoreans of the sixth to fourth centuries,² and through them with the larger phenomenon of ancient Greek Pythagoreanism, we have to know who these Pythagoreans were. This can be done only by relying on the early sources, i.e., those before 300, though they too are problematic and contradictory. In part this is due to their fragmentary nature, but the main difficulty is that they not only reveal *partial* aspects of ancient Pythagoreanism in its almost 200-year history — from the rise of the Pythagorean community in Croton in c. 530 to the disappearance of the school after 350 — but they also give conflicting interpretations of those aspects. Quite often we introduce additional contradictions into our sources by treating various isolated references to Pythagoras as if they were exhaustive historical judgments. In Plato’s only mention of Pythagoras (*Rep.* 600a-b), the latter appears as a mentor of youth, beloved of his pupils and followers, the founder of a particular way of life; there is no hint here either of natural philosophy and mathematics, or of political engagement.

¹ Burkert (1972).

² This and all further dates are BCE.

To suppose this is all Plato knew about Pythagoras is as rash as to suppose that he knew nothing of Democritus or Xenophon, whom he does not mention even once. Plato's students, Xenocrates, Heraclides Ponticus, and Aristotle did know Pythagoras as a scientist and natural philosopher, whereas Aristoxenus was the first to write in detail about his political activity.³ This does not necessarily mean that their views on Pythagoras were mutually exclusive. None of these traditions — Platonic, Aristotelian, or Aristoxenian — is entirely correct or entirely unreliable. Each piece of evidence from each author must be assessed individually and according to its value.

Indeed, as far as our specific question is concerned, it is impossible, based on the evidence of Plato and Aristotle, to establish who was a Pythagorean and who was not, for both of them avoided calling anyone "a Pythagorean." Neither Philolaus and his students in the *Phaedo* nor Archytas in the 7th Letter are called Pythagoreans. Was Plato's teacher in mathematics, Theodorus of Cyrene (43A2 DK), a Pythagorean or a friend of Protagoras? Of course, he could be both, but Plato testifies only to the second. Aristotle's treatises are quite densely populated with anonymous Pythagoreans (οἱ Πυθαγόρειοι, οἱ Ἰταλικοί) and to a lesser degree with individual Pythagoreans. He does mention by name Alcmaeon, Hippiasus, Hippo, Philolaus, Eurytus, and Archytas, but he never tells us that they were Pythagoreans.⁴ It seems that Aristoxenus was the first, in the preserved part of the tradition, to call somebody a Pythagorean.⁵ To be sure, Aristotle also wrote works on individual Pythagoreans or against them (*On Archytas' Philosophy, Against Alcmaeon*); besides, he compiled two special monographs: *On the Pythagoreans* (fr. 191–6 Rose), containing a collection of mostly legendary material, and *Against the Pythagoreans* (fr. 198–205 Rose), in which he criticized their philosophical and scientific theories. It would appear that these two monographs, the material of

³ See Xenocr. fr. 87 Isnardi Parente; Her. Pont. fr. 88 Wehrli; Arist. fr. 191 Rose and *Protr.* fr. 18 and 20 Düring. Before Aristoxenus only the evidence of Antisthenes (fr. 51 Declava Caizzi) and Aristotle (fr. 191 Rose) implies Pythagoras' participation in political life.

⁴ Alcmaeon (*Met.* 986a27), Hippiasus (*Met.* 984a7), Hippon (*Met.* 984a3 and *De an.* 405b2), Philolaus (*EE* 1225a33), Eurytus (*Met.* 1092b10) and Archytas (*Met.* 1043a21, *Rhet.* 1412a12 and *Pol.* 1340b26).

⁵ In his book *On Pythagorean Numbers*, Speusippus probably mentioned Philolaus (fr. 28 Tarán).

which he used later, were written in the Academy, since he refers to them in the *Metaphysics* A (986a12), which is usually dated before 347. The overwhelming majority of Aristotle's references to Pythagoreans (Πυθαγόρειοι) are contained in the *Physics*, *On the Heavens*, and those parts of the *Metaphysics* (A, B, I, Λ, M, N) which are taken to belong to his early works.⁶ In the later treatises such references are sporadic and, with few exceptions, free from polemics. If to these are added the *Protrepticus* (fr. 18, 20 Düring), the early dialogue *On Poets* (fr. 75 Rose), and the treatise *On the Good* (fr. 2 Ross), which reviews the theories of Plato and the Pythagoreans, it turns out that almost all that Aristotle had to say about Pythagoras and the Pythagoreans in general was said during his stay at the Academy. Evidently the theories of Plato and the Platonists were the background against which he formulated his own approach to the Pythagorean School. Most of his evidence about Pythagorean number philosophy is related to his criticism of Plato's doctrine on first principles and of the Academic theories based on it.⁷

The background of Aristoxenus' interest in Pythagoreanism was quite different. He was closely linked with the Pythagoreans of Archytas' circle through his father Spintharus (fr. 30). In addition, he was acquainted with the pupils of Philolaus and Eurytus, and counted them among the last Pythagoreans: Echecrates, Phanton, Diocles, and Polymnastus of Phlius, as well as Xenophilus of Chalcidike in Thrace, who died in Athens at the age of 105.⁸

All the indications are that Aristoxenus lived at or visited Phlius in the Peloponnese before he went to Athens, where he studied first under Xenophilus, then under Aristotle. Having at hand fuller and more reliable information than other writers of his day (including documentary

⁶ Düring (1966) 49ff. All references to Pythagoras also relate to this period.

⁷ *Phys.* 203a3f.; *Cael.* 300a14f.; *Met.* 987a31, 987b10, b22, b29, 990a30–4, 996a6, 1001a9, 1002a11, 1028b16–9, 1036b15, 1053b10, 1078b30, 1080b15, b30, 1083b8–15, 1090a20–35 and 1091a12f.; cf. *MM* 1182a11: Pythagoras as predecessor of Plato. See also *On the Good* (test. and fr. 2 Ross) and *Against the Pythagoreans* (fr. 13 Ross). Speusippus and the Pythagoreans: *Met.* 1072b30 = fr. 42 Tarán and *EN* 1096b5–8 = fr. 47 Tarán. Independently number philosophy appears very rarely (*Cael.* 268a11).

⁸ Fr. 18–20 Wehrli. Diodorus Siculus (15.76) dates the “last of the Pythagoreans” to *Ol.* 103.3 (366/5). This date may have been deduced by Apollodorus of Athens, relying on Aristoxenus (see below n. 17). It does not necessarily indicate the year of death of the last Pythagorean known to Aristoxenus.

evidence), he devoted three biographical works to Pythagoras and the Pythagoreans and set forth their ethical and political doctrines in the *Pythagorean Precepts*.⁹ Without him we would have lost a very substantial part of the Pythagorean tradition, especially taking into account that he was one of the founders of biography, which lent a powerful stimulus to the systematization of the tradition on Pythagoras and the Pythagoreans.¹⁰

In his vast and varied writing Aristoxenus brought together the traditions of several schools without being truly committed to any of them. Determined to keep his distance from all authorities, he allied himself with Aristotle against the Pythagoreans and with the Pythagoreans against Aristotle. Thus, in musicology he breaks decisively with the mathematical harmonics of the Pythagoreans, accusing them of contradicting empirical facts (*Harm.* 2.32–3). Relying on Aristotle's qualitative approach to natural phenomena, and using his empirical descriptive method, he bases his analysis of music on the subjective perception of musical tones by the human ear. But contrary to Aristotle, he shared the Pythagorean theory that the soul is the "harmony" of corporeal elements, and therefore mortal.¹¹ Aristoxenus strove to present Pythagoras and the Pythagoreans in the most favorable possible light, often in defiance of established models, including those that appear in Aristotle's *On the Pythagoreans*. Although speaking against Plato and the Academy (fr. 62, 67 Wehrli), he at the same time attributed Plato's doctrines to the Pythagoreans.¹² In this respect his *Pythagorean Precepts* arouse perhaps the greatest doubts, because the Pythagorean stratum in this work cannot always be confidently

⁹ Περί Πυθαγόρου καὶ τῶν γνωρίμων αὐτοῦ (fr. 11–25), Περί τοῦ Πυθαγορικοῦ βίου (fr. 26–32), Πυθαγορικαὶ ἀποφάσεις (fr. 33–41), Ἀρχύτα βίος (fr. 47–50). Wehrli's distribution of the fragments in different works is not always successful. Aristoxenus mentions the Pythagoreans in other writings: Παιδευτικοὶ νόμοι (fr. 43), Μουσικὴ ἀκρόασις (fr. 90) and Ἱστορικὰ ὑπομνήματα (fr. 131); see also fr. 123.

¹⁰ For a generally positive assessment of Aristoxenus as a historian, see Rohde (1901) 117; Delatte (1922) 207–13; von Fritz (1940) 27ff.; idem. (1963) 175 and Momigliano (1993) 74ff. Cf. Philip (1966) 13ff. (negative) and Burkert (1972) 106ff. (critical).

¹¹ Fr. 118–21. In Plato's *Phaedo* this theory is put forth by Philolaus' pupils Simmias of Thebes (86b 6–7) and Echecrates of Phlius (88d3–4).

¹² See further below.

separated from the theories of the Academy and the Lyceum.¹³ It is interesting that it was this work that exerted a strong influence on the pseudo-Pythagorean ethical treatises.¹⁴

Aristoxenus' rationalistic treatment of Pythagoreanism, which has decisively polemical overtones, rested on his acquaintance with the last Pythagoreans, and, for the most part, faithfully reflected the *realia* of the late fifth and fourth centuries. If one makes allowances for his tendentious and polemical bent, it is clearly preferable to the legendary tradition that he disputes. Yet it was not only this earlier tradition, as reflected in Aristotle, with which he was arguing. We have to bear in mind that he was writing his Pythagorean works when the last Pythagoreans had already died. But Pythagoreanism as a whole, as the totality of what was conveyed in antiquity by the name of Pythagoras, lived on after that, and with time assumed new forms. Among its filiations were "Pythagorizing" philosophers, for example, Diodorus of Aspendus (*acme*, c. 330s), who had nothing to do with the politics, philosophy or science of the Pythagoreans but merely led an ascetic way of life which had become popular.¹⁵ Their reflection in Middle Comedy, the so-called Pythagorists, often appeared on the Athenian stage in the second part of the fourth century as indigent preachers of metempsychosis and vegetarianism.¹⁶ The decline of the Pythagorean School after 350 coincides with a veritable boom in philosophical

¹³ Rohde (1901) 162ff.; Wehrli, comm. on fr. 33–41; de Vogel (1966) 174ff. and Burkert (1972) 107ff. cf. Huffman (2006a).

¹⁴ Centrone (1990) 38ff.

¹⁵ Timaeus: Diodorus led an eccentric life and *pretended* to be a pupil of the Pythagoreans (*FGrHist* 566F16); Sosicrates: to gratify his vanity, Diodorus began to wear a long beard, long hair, and put on a worn cloak, whereas before him the Pythagoreans always went about in white clothing, made use of baths and had customary hair-cuts (fr. 15 Giannattasio Andria = Athen. 4.163f).

¹⁶ DK 58 E. The Pythagorists come into being as rapidly as they vanish; they are absent both from Old and from New Comedy, though both were eager to portray philosophers. They do not appear on stage (they are merely talked about) and are, as a rule, anonymous. Those who are named, e.g., Epicharides, Melanippides, Phaon, Phylomachus and Phanus from the *Tarentines* of Alexis (DK 58E1) turn out to be, not indigent followers of Archytas, but more or less well-known Athenians, whose way of life is played on through their illusory Pythagoreanism. See Arnott (1996) 635 and 639ff. My impression is that the character of the Pythagorist, cropping up in one comedy after another, is to be found only on the Athenian stage, to which in reality it owes its existence.

and historical literature about Pythagoras and the Pythagoreans, first in the Academy and the Lyceum, and later outside them. Even the Stoic Zeno wrote his Πυθαγορικά, *Pythagorean Questions* (D.L. 7.4). In the last third of the fourth century at least four biographies of Pythagoras were written, and with each century that passed their number increased, while pseudo-Pythagorean writings multiplied at an even greater rate. Aristoxenus' younger contemporary, the historian Neanthes of Cyzicus, was the first to refer to the pseudo-Pythagorean writings; he mentions a letter of Pythagoras' son Telauges to Philolaus (*FGrHist* 84F26).

It seems that Aristoxenus did not like this post-Pythagorean reality and decided to defend what he considered to be the historical reality, by refuting some old legends and ignoring some recent phenomena. If this was the case, we may sympathize with his goals, though, as is usual in such cases, the reality he described happened to be quite idealized. His Pythagoreans were ideal politicians, philosophers and scientists living in harmony with their ethical principles, ideal educators like Xenophilus (fr. 43 Wehrli) or ideal friends, like Damon and Phintias or Cleinias and Prorus. And yet, there are obvious differences between Aristoxenus' story about Damon and Phintias (fr. 31 Wehrli) and Neanthes' story about Myllias and Timycha, which depends on it. Myllias' and Timycha's Pythagorean friends perished, not daring to cross the bean field, whereas the courageous Timycha refused to divulge the ban on eating beans to the bloodthirsty tyrant Dionysius, biting off her tongue instead and spitting it out (*FGrHist* 84F31). Aristoxenus' Pythagoras was particularly fond of beans (fr. 25 Wehrli), and the Pythagoreans must have followed his predilections. Other points of divergence were metempsychosis and vegetarianism. Contrary to the Pythagorists of comedy, Aristoxenus' Pythagoreans (as, indeed, he himself) did not believe in metempsychosis and though they normally ate bread and honey, they did not abstain from meat (fr. 27–8 Wehrli). Aristoxenus is often criticized for ignoring the Pythagorists, but in this respect he was no different from his contemporaries; the historians and biographers of the late fourth century pay no attention to the Pythagorists of comedy. Aristoxenus ignored Diodorus of Aspendus as well, for though Diodorus called *himself* a Pythagorean, his extravagantly ascetic way of life had nothing to do with the Pythagorean way of life (*bios pythagorikos*) as known to Aristoxenus. There is no

sign that Aristoxenus mentioned any members of Pythagoras' family like Theano, Telauges or Arimnestus, whose biographies and pseudographs began to be fabricated in the last third of the fourth century.¹⁷

Thus, we have two different versions of the Pythagorean way of life: one, mentioned by Plato and described by Aristoxenus in a special treatise, and another, based on a great number of prescriptions and taboos, contained in the Pythagorean *symbola*, among them abstinence from beans and meat. As I have said, Aristoxenus' version is often taken for a late rationalization of the "archaic" *bios pythagorikos* and is thus regarded as unreliable, but Plato is on his side. He refers to the Pythagorean way of life quite approvingly (*Rep.* 600a-b), and it was certainly not seen by him as an "alternative lifestyle," but merely as different from that of the majority, and moreover as *better*. Among its exponents, Plato was thinking first and foremost of Philolaus, Archytas, and their associates. There is no reason to project onto them the style of life of Diodorus of Aspendus or the Pythagorists of comedy. Aristoxenus' Pythagoreans "used medicine to purify the body and music to purify the soul,"¹⁸ and not ritual purifications, as prescribed by the *symbola*. In Aristotle's work *On Pythagoreans*, the ban on beans was accompanied by six different explanations, none of which was connected to metempsychosis (fr. 195 Rose = D.L. 8.34). Nothing implies that Aristotle intended to analyze the Pythagorean way of life on the basis of the sayings he collected. The case with vegetarianism, one of the main features of Pythagoreanism in popular tradition, is similar. From Heraclides Ponticus' work, *On the Pythagoreans*, we learn that Pythagoras introduced a meat diet for athletes (fr.

¹⁷ An anonymous biography of Pythagoras, which has come down to us in excerpts from Diodorus Siculus (last third of first century), is based chiefly on Aristoxenus and is, therefore, for the most part free from the anecdotal and pseudo-Pythagorean material that characterizes the other biographies of that time (Diod. 10.3–11 = Thesleff [1965] 229ff.) The influence of Aristoxenus is noted by Delatte (1922) 225; von Fritz (1940) 22ff. and Burkert (1972) 104 n. 36. In a number of cases Diodorus differs from Aristoxenus; see, e.g., 10.3.4 on Pythagoras travelling from Italy to visit Pherecydes or 10.6.1 on metempsychosis and abstaining from meat. Since Diodorus dates by the Olympiads, his direct source is later than Apollodorus of Athens (second century).

¹⁸ Fr. 26 Wehrli. According to Theophrastus, Aristoxenus used music to treat mental illness (Aristox. fr. 6 Wehrli with comm.) and his Pythagorean teachers, such as Xenophilus, may also have applied musical psychotherapy. Theophrastus himself believed that music could heal both mental and physical ailments: fr. 716 FHS&G (end), 726 a-c and Barker (2007) 433.

40 Wehrli). Milo, in whose house the Crotonian Pythagoreans met and whom Aristotle called “an excessive eater” (πολυφάγος, fr. 520 Rose), is said to eat nine kilograms of meat and the same amount of bread every day (Phylarch. *FGrHist* 81F3; Athen. 10.412e–413a). Even the *symbola*, as recorded by Aristotle (fr. 194 Rose; Iamb. *VP* 85), demanded, not entire rejection of animal foods, but only abstinence from certain organs (e.g., the uterus and the heart) or certain kinds of meat (e.g., from non-sacrificial animals) and fish. So, Aristoxenus, who staunchly maintained that Pythagoras abstained only from plough oxen and rams, while using other animal flesh as food and being especially partial to sucking pigs and tender kids (fr. 25 Wehrli), was in perfect accord with this part of the tradition.

We cannot use the “Pythagorean way of life” as a criterion in identifying someone as a Pythagorean, since we do not know, in fact, what exactly it comprised. In particular, we do not know whether any of the Pythagoreans known to us by name shared even Pythagoras’ best-known and reliably attested religious doctrine, metempsychosis, and practiced the vegetarianism that was associated with it. The way of life of the Pythagorean aristocracy as a whole, to the extent that we can reconstruct it, was in many aspects close to the way of life of the Greek aristocracy of the sixth and fifth centuries. Pythagoras merely modified it, taking account of new ideas, some of which were held, not only by him, but also, for example, by Xenophanes: a reflective attitude to religion, rejection of luxury, an increased role for wisdom (σοφία), etc.¹⁹ A prominent feature in Aristoxenus’ account of the Pythagorean way of life was “friendship” (φιλία).²⁰ Φιλία is broader than the relations between two close friends; it links even Pythagoreans who are unacquainted one with another, obliging each of them to employ all means to aid their “friends” where their lives or welfare are threatened. Friendship of this kind, going beyond personal relationship, has a quite distinct socio-political meaning: Pythagoreans from

¹⁹ The struggle with luxury (τρυφή) and immoderation as a whole is one of many elements that unite Pythagoras with the ideology represented by the first lawgivers, the Seven Sages, and the Delphic oracle. Xenophanes spoke out against the luxury (ἀβροσύνη) of the Colophonians (DK 21B3), seeing it as the influence of the Lydians. See Bernhard (2003) 51ff.

²⁰ Aristox. fr. 31 and 43 Wehrli; Iamb. *VP* 230–9 = DK 58D7&9 (from Aristoxenus); see also Neanth. *FGrHist* 84F31 and Tim. *FGrHist* 566F13.

different cities were linked by the bonds of mutual aid even before they became personally acquainted.²¹ This circumstance greatly facilitated the spread of the Pythagoreans' political influence and also its stability. Nevertheless, "friendship" (φιλία) could not prevent the split in the Pythagorean society at Croton at the end of the sixth century and Pythagoras' subsequent flight to Metapontum.

In Aristoxenus' account of the political struggle in Croton during Pythagoras' lifetime there are no fundamental departures from what Aristotle, Dicaearchus (fr. 34 Wehrli) and Timaeus report, though his treatment is more apologetic. Aristotle says that "Pythagoras foretold to the Pythagoreans the coming political strife (στάσις); that is why he departed to Metapontum unobserved by anyone" (fr. 191). According to Aristoxenus, "for this reason Pythagoras went away to Metapontum, where, it is said, he ended his days" (fr. 18 Wehrli); this accords with Timaeus' account (*apud* Iust. 20.4.17). By "this reason" the so-called Cylonian conspiracy is meant, which Aristoxenus describes as follows:

Cylon, a Crotoniate, by birth, reputation and wealth was one of the first citizens, but in other respects he was ill-tempered, violent, disruptive and tyrannical in character. Being eager to share the Pythagorean way of life, he approached Pythagoras, by then an old man, but was turned down for the reasons stated. After this happened, he and his friends began a violent struggle against Pythagoras and his companions. (fr. 18 Wehrli)

Aristotle also wrote of personal rivalry between Cylon and Pythagoras (DK 14A15, see fr. 21.1 Gigon) and named another rival of Pythagoras, Onatas, whose name appears in the list of Crotonian Pythagoreans drawn up by Aristoxenus (DK 1.446.13). The presence of members of the Pythagorean *hetairia* among Pythagoras' political opponents suggests that Aristoxenus' account of events was intended to draw a veil over the fact that Cylon too might have had links to the Pythagorean society.²² In Apollonius' account of the Cylonian conspiracy, Hippasus

²¹ See, e.g., the stories of Cleinias of Tarentum and Prorus of Cyrene, and Damon and Phintias (DK 54A3 and 55, from Aristoxenus).

²² Iamblichus calls Cylon "the exarch of the Sybarites" (VP 74). Given the decisive role of the Pythagoreans in the victory over Sybaris and their increased influence after the war, it is natural to suppose that the office of "exarch of the Sybarites" could

also turns out to be an adversary of Pythagoras, while, moreover, being a member of the ruling Crotonian “thousand” (*FGrHist* 1064F2 = Iamb. *VP* 257). Thus, several independent sources (among them Timaeus) point to the existence of a version of Cylon’s conspiracy which is different from that of Aristoxenus and treats the events not simply as a conflict between Pythagoreans and supporters of Cylon, but as, among other things, a rift within the Pythagorean society.²³ It is reasonable to suppose that Aristoxenus’ version reflected the tendency of the Pythagorean tradition to avoid the topic of internal political strife in the society.

When Aristoxenus says about the last Pythagoreans, that they “maintained their original customs and disciplines” (ἐφύλαξαν μὲν οὖν τὰ ἐξ ἀρχῆς ἥθη καὶ τὰ μαθήματα, fr. 18 Wehrli), this must also reflect, to some extent, their self-identification as the true heirs of the early school. Customs (τὰ ἥθη) and (to a lesser extent) disciplines (τὰ μαθήματα) were usual topics of Aristoxenus’ Pythagorean writings. His portrait of Pythagoras the mathematician (fr. 23–4 Wehrli) is supported by Aristotle, Eudemus and other writers of the second half of the fourth century.²⁴ According to Aristoxenus (fr. 90 Wehrli), Hippasus conducted an experiment with bronze discs, confirming the numerical expressions of the principal concords discovered by Pythagoras, 2:1 for the octave, 3:2 for the fifth, and 4:3 for the fourth.²⁵ Aristoxenus was not interested in theoretical philosophy, and,

hardly be open to someone unconnected to the Pythagorean *hetairia*. Minar (1942) 69ff. suggested that Cylon was a governor of Sybaris as a Pythagorean and was only expelled from the society later.

²³ Traces of the tradition of the schism among the Pythagoreans were noted by Corssen (1912) 339ff., who pointed to the passage on Cylon being expelled from the Pythagorean society and setting fire to the school (Olymp. *In Phaed.* 1.13.18). Delatte (1922) 244ff. raised objections but his arguments are debatable. Von Fritz (1940) 59ff. followed Delatte in maintaining that the schism could not have been the *main* reason for Cylon’s revolt, although he did not reject the account of the schism itself. See also Bugno (1999) 39ff.

²⁴ Arist. fr. 191 Rose; Eud. fr. 133 Wehrli; Apollodorus Logistikos (D.L. 8.12, cf. 1.25); Neanthes (*FGrHist* 84F29); Hecataeus of Abdera (*FGrHist* 264F25.98) and Anticleides (*FGrHist* 140F1).

²⁵ If Aristoxenus had projected fourth-century Pythagorean science onto Pythagoras, far more achievements would be linked with the name of Pythagoras than we find in the fragments of the Peripatetic.

conspicuously, philosophy does not figure among the things that later Pythagoreans inherited from Pythagoras. The only “philosophical” doctrine he connects with Pythagoras concerns “likening all things to numbers” (fr. 23 Wehrli), and even this is mentioned in passing. In the *Pythagorean Precepts* Aristoxenus described ethico-political doctrines of the school by referring to his anonymous informants (in other writings he mentions Spintharus and Xenophilus by name: fr. 25, 30 and 43 Wehrli) and not to Pythagoras himself.²⁶ Iamblichus repeatedly felt compelled to append the note “all of this comes from Pythagoras” to the stories from Aristoxenus’ *Pythagorean Precepts* (VP 102, 174 = fr. 33 Wehrli, 183, 198, 213 and 230). This is the surest indication that his source said nothing of the kind.²⁷ Even if we suppose that Aristoxenus’ Pythagorean informants implied that their doctrines came directly from the founder of the school, the fact is that the most visible figure behind the precepts is Plato, not Pythagoras. When we read, e.g., that education in arts and sciences has to be voluntary and only in this case reaches its goals (fr. 36 Wehrli),²⁸ this unmistakably draws on Plato’s socio-pedagogical principles,²⁹ just as when we read that true love of what is fine (φιλοκαλία) concerns customs (ἥθη) and branches of knowledge (ἐπιστήμαι), and not what most people think, namely, things necessary and useful for life (τὰ ἀναγκαῖα καὶ χρήσιμα πρὸς τὸν βίον, fr. 40 Wehrli). The necessary and the useful hold the lowest grade in Plato’s hierarchy of activities, whereas Archytas praised exactly the practical utility of mathematics (47B3).

²⁶ Cf. Aristox. fr. 40 Wehrli, with comm., and Huffman (2006a) 106 n. 2.

²⁷ Rohde (1901) 141ff., 158, 160 and 163.

²⁸ As Carl Huffman has reminded me, in another passage of this work, the willingness of the teacher and student is compared to the willingness of the ruler and ruled: “For supervision should arise when both desire it, both the ruler and the ruled alike, just as they also said it was necessary that learning that arises correctly come to be willingly, when both wish it, the teacher and the learner” (Iamb. VP 183 = fr. 41d Huffman).

²⁹ “Nothing that is learned under compulsion stays with the mind” (*Rep.* 536d-e). In the *Laws*, Plato says that education that includes various playful activities (819b-c) makes the future citizens obey the laws voluntarily; see, e.g., Heitsch and Schöpsdau (2003) 219ff. In the *Laws* (832c-d) Plato criticizes democracy, oligarchy and tyranny, “for none of them constitutes a voluntary rule over voluntary subjects, but instead a voluntary rule, always with some violence, over involuntary subjects,” and contrasts them to the present regime. Cf. *Plt.* 276d-e: the true king and politician rules with the voluntary assent of all his subjects.

Thus, we cannot use doctrines recorded in the *Pythagorean Precepts* as a criterion in identifying someone as a Pythagorean, since we cannot be sure that these are Pythagorean doctrines. Besides, anonymous Pythagoreans as standardized bearers of a generalized “school doctrine” are suspicious in themselves. Unlike the Academy, Garden, and Stoa, which were institutionalized philosophical schools with a range of well-defined doctrines, varied though these were at different times, the Pythagorean school arose not as a philosophical school, but as a political society, a *hetairia*. The teachings of its founder were not set down in writing, and the school itself, widely scattered in many cities, evolved in the course of almost two centuries. It is no surprise that in reliable sources we can find nothing resembling a Pythagorean orthodoxy. All Pythagoreans were different, although all shared common features with other Pythagoreans. This means that certain Pythagoreans had characteristics in common with some Pythagoreans, but not with others. For example, mathematics is the common characteristic for Hippasus, Theodorus, Philolaus, and Archytas; natural philosophy for Alcmaeon, Hippasus, Menestor, Hippo, and Philolaus; medicine for Democedes, Alcmaeon, Iccus, and Hippo; and athletics for Milo, Astylus, and Iccus. However, not one common characteristic can be found for Hippasus and Iccus, Milo and Theodorus, or Menestor and Eurytus, except, of course, that they were Pythagoreans. For the period up to the middle of the fifth century, a common characteristic *might be* belonging to Pythagorean *hetairiai*, but we do not, unfortunately, know what belonging to a *hetairia* meant in each individual case and, therefore, cannot make use of it for our purpose. In particular it is not known whether it assumed active participation by every Pythagorean in politics. In any case, political activity ceases to be one of the constituent features of Pythagorean communities after the middle of the fifth century. It is, for example, quite unclear whether we may count Philolaus’ school at Thebes a *hetairia*.

It does not follow from Aristoxenus’ historical and biographical writings that he thought the Pythagoreans to be a philosophical school *par excellence*; he rather focused on political events and on the way of life. His individual Pythagoreans, like individual Pythagoreans of Aristotle, constitute a quite tangible group, as distinct from their anonymous Pythagoreans. It is this group that interests us most of all, because these people were regarded as Pythagoreans by their

contemporaries and in the first place by the Pythagoreans themselves. Although this criterion, as will be made clear by what follows, is not absolutely reliable, I treat it as fundamental. The most important source for determining who was a Pythagorean is the catalogue of 218 Pythagoreans passed down by Iamblichus, which, since the time of Erwin Rohde, has been taken to be connected with Aristoxenus.³⁰ When determining who should go into the Pythagorean sections of the *Fragmente der Vorsokratiker*, Diels relied on this catalogue, though he was not always consistent. Aristoxenus' authorship was subsequently supported by Timpanaro Cardini and Burkert adduced further considerations in his favor.³¹ Recently Carl Huffman stressed the importance of the catalogue, although he expressed some doubts regarding it,³² which I shall try to dispel. All those in the catalogue whose chronology can be established are from the time before Aristoxenus, that is, the sixth to the first half of the fourth century. The catalogue is independent of pseudo-Pythagorean literature (the names of some 18 writers from Thesleff's collection are absent) and could not have been compiled by Iamblichus, who has 18 more names of Pythagoreans not found in the catalogue. For example, Iamblichus reports that Diodorus of Aspendus was received into the Pythagorean school by Aresas of Lucania, the last scholarch of the school, since by then there was a shortage of Pythagoreans (*VP* 266, from Apollonius). Neither Diodorus nor Aresas figure in the catalogue. Iamblichus gives the names of several others scholarchs, Aristetas of Croton, Pythagoras' son Mnesarchus, Bulagoras and Gartydas of Croton (*VP* 265–6), none of whom are mentioned in Aristoxenus' catalogue. Further, the origin of a number of Pythagoreans listed in the catalogue differs from the data in other sources but coincides with that given by Aristoxenus.³³ Their distribution by cities is also instructive: the greatest number of names (43) is from Tarentum, the birthplace of Aristoxenus, and 29 and 38 respectively are from the other two centers of Pythagoreanism, Croton and Metapontum.

The total number of names as well as their classification by 27 different *poleis* and peoples indicate that Aristoxenus, apart from oral

³⁰ Iamb. *VP* 267 = *DK* 58A and Rohde (1901) 171.

³¹ Timpanaro Cardini (1964) 3.38ff.; Burkert (1972) 105 n. 40.

³² Huffman (2008a) 292ff.

³³ Burkert (1972) 105 n. 40.

tradition, relied on some documentary sources. This is confirmed by the fact that some two thirds of the names in the catalogue occur only there. Of the 56 names mentioned outside the catalogue, more than half remain simply names: either we know almost nothing of these people, or we know of some insignificant episodes. Since most of the individuals named have nothing to do with philosophy or science, Aristoxenus' catalogue cannot be regarded as a list of members of the Pythagorean School. Sources link some Pythagoreans with politics and legislation, others with athletics, and still others appear as heroes of oral tradition, like Damon and Phintias or Cleinias and Prorus.³⁴ It is difficult to say whether those who only adhered to the religious teaching of Pythagoras and led a life of abstinence are included, since practically nothing is known about these people. Most likely they were of no interest to Aristoxenus and the group of the last Pythagoreans from which his information derives.

Although Aristoxenus used documentary sources and Pythagorean oral tradition, he hardly had exhaustive and accurate information on the ancient Pythagoreans. Hence it should not be presumed that *all* Pythagoreans who were at all well known are included in the catalogue, or, on the other hand, that *only these* 218 persons are "genuine" Pythagoreans. Apart from all else, in the time which passed between Aristoxenus and Iamblichus, some names could have been left out of the catalogue or been displaced through a copyist's error, while others might have been distorted in the copying process, and still others added to the catalogue. Thus, Hippasus of Metapontum appears among the Sybarites (*DK* 1.446.30), Ecphantus of Syracuse among the Crotoniates (446.11), Philolaus of Croton among the Tarentines (446.22), Astylus of Croton and Eurytus of Tarentum (Aristox. fr. 19) among the Metapontines (446.20, 22), Xenophilus of Thracian Chalcidice among the Cyzicenes (448.4). Alcimachus, Deinarchus, and Meton, defenders of the Crotonian constitution (Iamb. *VP* 257), are called natives of Paros (447.2–3); it is no less strange that Paros appears in the catalogue among the Italian *poleis*, after Sybaris and before Locri. Another Pythagorean from Paros, Thymarides, figures in Iamblichus as a Parosian (*VP* 239) and as a Tarentine (*VP* 145); the latter is much more plausible. Four Pythagoreans from Carthage

³⁴ See Aristox. fr. 31, 131 Wehrli and Diod. 10.4.1 = *DK* 54A3 (from Aristoxenus).

with typical Greek names (447.1) also give rise to serious doubt. O. Masson supposed that they were Chalcedonians (Καλχηδόνιοι), not Carthaginians (Καρχηδόνιοι),³⁵ but how did Pythagoreans come to be at Chalcedon in Asia Minor? Moreover, one of the Carthaginians, Miltiades, figures in the story of mutual aid among Pythagoreans of different peoples (Iamb. *VP* 128), which according to Diels is from Aristoxenus (DK 58D7). The hero of another such story, the Tyrrhenian Nausithous (*VP* 127), is also mentioned in the catalogue (448.5). K. Geus considered Miltiades and the three other Pythagoreans from Carthage to be historical figures,³⁶ although in the classical period they turn out to be the only Greeks, who are said to be from Carthage. I would not exclude the possibility that the Carthaginian Pythagoreans owe their existence to Aristoxenus.

Democedes of Croton (*DK* 19), who married the daughter of the Pythagorean athlete and military leader Milo (Hdt. 3.137), is missing from the catalogue.³⁷ Amyclas is absent, but his friend Cleinias of Tarentum is there, though Aristoxenus mentions them both as Pythagoreans and friends of Plato (fr. 131 Wehrli). Strangely, Aristoxenus' father Spintharus, who belonged to the circle of Archytas, is missing. Absent are the pupils of Philolaus, Simmias and Cebes of Thebes (44A1a, B15), who appear in Plato's *Phaedo*, although another character in the dialogue, Echecrates of Phlius, is present.³⁸ Thebes, one of the centers of Pythagoreanism in the fifth century, is not mentioned in the catalogue. Ecphantus of Syracuse appears in the catalogue among the Pythagoreans of Croton (*DK* 1.446.11), yet his fellow-countryman and contemporary Hicetas, mentioned by Theophrastus (*DK* 50A1), does not. Parmenides' teacher, Ameinias, as recorded by Sotion, is not named.³⁹ These are additions to the catalogue that deserve serious examination.

These seven "additions" to the catalogue balance an equal number of "excisions": those whom Aristoxenus' sources regarded as

³⁵ Masson (1995) 229ff.

³⁶ Geus (1994) 198ff.

³⁷ Hermippus (fr. 22 Wehrli = *FGrHist* 1026F21 = *DK* 19A2) named his father Caliphon as a pupil of Pythagoras and, although this biographer's evidence on Pythagoras is normally unreliable, in this case he could have made use of a sound tradition.

³⁸ Echecrates of Phlius is not identical with Echecrates of Locri, with whom Timaeus communicated (*FGrHist* 566F12), *pace* Jacoby (1954) 552.

³⁹ D.L. 9.21 = *DK* 27. His source could be Timaeus: Jacoby (1954) 326 n. 200.

Pythagoreans, but modern scholarship for various reasons excludes. This applies, for example, to the renowned lawgivers Zaleucus of Locri and Charondas of Catana, who figure as Pythagoreans, not only in the catalogue, but also in Aristoxenus' fragments (fr. 17 and 43 Wehrli). To all appearances Zaleucus and Charondas, who lived long before Pythagoras, were associated with him by the Pythagorean lawgivers of the second half of the fifth century from Locri and Rhegium.⁴⁰ Thus, in this instance Aristoxenus recorded a venerable, though unreliable, Pythagorean tradition, which aimed at conferring retrospectively on Pythagoras the reputation for being a lawgiver, by making Zaleucus and Charondas his followers. Another such "pair" are the well-known wonder-workers Aristeas and Abaris. Aristeas of Proconessus (turn of sixth century) was the author of the poem *Arimaspea*, which described his journeyings in search of the Hyperboreans. In the course of his life Aristeas twice disappeared, and, 240 years later, as Herodotus records (4.13–5), he reappeared at Metapontum and commanded the citizens to set up an altar to Apollo and a statue to himself. The catalogue duly lists him among the Pythagoreans of Metapontum. Abaris, a mythical priest of Apollo and expert on the Hyperboreans, is the only representative of this legendary people in the catalogue. As Bolton demonstrated, Aristeas and Abaris were associated with Pythagoras in the legendary tradition of the fifth century, which was subsequently used and embellished by Heraclides of Pontus.⁴¹ In this instance the legendary, the literary, and the historical traditions are partly superimposed on one another.

Parmenides and Empedocles are also the sole representatives of their *poleis* in the catalogue. There would appear to have been no Pythagorean societies in Elea and Acragas; hence, in the cases of

⁴⁰ In Iamblichus (*VP* 130 and 172) Zaleucus is mentioned together with another lawgiver from Locri, the Pythagorean Timares, who probably lived in the middle or second half of the fifth century: Delatte (1922) 182ff. and Ciaceri (1927) 47ff. In the same chapters Iamblichus names the Pythagorean lawgivers from Rhegium: Phytius, Helicaon, Aristocrates, and Theocles, who, like Timares, figure in the catalogue (to be sure, Theocles is named there as Euthycles, and in *VP* 172 as Theaetetus). On Rhegium as a center of Pythagoreanism after the middle of the fifth century, see Aristox. fr. 18 Wehrli and von Fritz (1940) 77. Rhegium's legislation was based on the laws of Charondas (Arist. *Pol.* 1274a23 and fr. 611.55 Rose, from excerpts from the *Constitution of Rhegium*).

⁴¹ Bolton (1962) 151ff., particularly 174ff.

Parmenides and Empedocles, one can only speak of their Pythagorean teachers. In the biographical tradition of the fifth and fourth centuries, Empedocles is often portrayed as the pupil of Pythagoreans (and even of Pythagoras himself);⁴² mention of Parmenides' teacher Ameinias also does not give the impression of being someone's invention. This could be the reason for their inclusion in the catalogue, although we do not know precisely whether this occurred before or after Aristoxenus. The influence of Pythagorean ideas on Parmenides and Empedocles is incontestable, yet both are philosophers too independent and important to be fully integrated into the Pythagorean tradition. Rather, they should be left among the "sympathizers" with Pythagoreanism. The next and last "excision" is Melissus, who is named with five other Pythagoreans from Samos. If there was a Pythagorean society on Samos, then in principle Melissus could have been a member, even if in philosophy he followed Parmenides and Zeno, just as the Pythagorean Ecphantus later followed Democritus and Anaxagoras. At the same time, unlike Zeno (who is not in the catalogue),⁴³ Melissus does not figure as a Pythagorean in other sources; we have no grounds other than the catalogue to regard him as one.

Seven questionable names out of 218 is a very good indicator of the reliability of the catalogue as a historical document. We may observe that all these instances involve famous people, three of whom (Aristeas, Zaleucus, and Charondas) lived before Pythagoras, while a fourth (Abaris) was a wholly legendary figure. The basis for their inclusion in the catalogue is understandable in each case (except that of Melissus), even though it appears unconvincing to us. The catalogue does not, however, show signs that the Pythagoreans strove to make "their own" all those famous individuals who in one way or another had contact with them. We do not find, for example, Democritus, Theaetetus, Epaminondas, and Eudoxus,⁴⁴ who had Pythagorean

⁴² Alcidas *ap.* D.L. 8.56; Theophr. fr. 227A FHS&G; Neanth. *FGrHist* 84F26 and Tim. *FGrHist* 566F14.

⁴³ Parmenides and Zeno as Pythagoreans: Callim. *ap.* Procl. *In Parm.*, 619.5–10; Strab. 6.1.1; Anon. Phot. 439a37 = Thesleff (1965) 238.20 and *schol. Iamb. VP* 267, p. 150.7ff. Deubner and Klein.

⁴⁴ Democritus (DK 14A6), Theaetetus (DK 43A4), Epaminondas (Aristox. fr. 18 Wehrli and Diod. 10.11, from Aristoxenus), Eudoxus (D.L. 8.86 = T7 Lasserre). According to Aristoxenus, Epaminondas called his teacher, Lysis of Tarentum, "father."

teachers, or Epicharmus, whom ancient tradition often associated with the Pythagoreans.⁴⁵ Since the catalogue is organized by *poleis* where there were Pythagorean societies, and since the majority of the names in it are unknown to us, it cannot be regarded as a list of famous figures, like that compiled by Hecataeus of Abdera, supposedly on the basis of “Egyptian sacred books.”⁴⁶ Hippasus, Menestor, or Hippo are mentioned in the catalogue, not because they were particularly famous, but because they were Pythagoreans. The catalogue contains the names of four Pythagorean Olympic victors⁴⁷ but not all the Olympic victors from Croton, Tarentum, Locri and other cities in Magna Graecia, where there were Pythagorean communities.⁴⁸ Alcmaeon of Croton is named, but not Acron of Acragas⁴⁹ or the renowned physician Philistion of Locri. Though there is a theoretical possibility that some names were added to the catalogue, no one has yet succeeded in proving this. If we disregard Charondas, Zaleucus, and Aristetas, the catalogue is free from anachronisms, which would inevitably occur, if somebody tried to “amplify” its data.

Most probably, the list of the Pythagoreans comes from Aristoxenus’ work *On Pythagoras and his Associates* (Περὶ Πυθαγόρου καὶ τῶν γνωρίμων αὐτοῦ), where we find many close parallels to this document, beginning with Italian lawgivers Zaleucus and Charondas and ending with the last Pythagoreans (fr. 17–8). It was not Greeks alone who came to Pythagoras, says Aristoxenus, but also Italians, including Lucanians (fr. 17); this agrees with the catalogue, where four Lucanians figure. Although “associate” (γνώριμος), like “companion” (ἑταῖρος) and “friend” (φίλος) by no means always has a political coloration, Aristoxenus applies it several times to the

⁴⁵ Epicharmus as Pythagorean: Plut. *Numa* 8; D.L. 8.7, 8.78; Clem. *Strom.* 5.14.100; Iamb. *VP* 241, 266 and Anon. *In Plat. Theaet.* 71.12.

⁴⁶ Hecataeus of Abdera wrote that Orpheus, Musaeus, Melampus, Daedalus, Homer, Lycurgus, Solon, Pythagoras, Oenopides, Democritus, Plato and Eudoxus all visited Egypt (*FGrHist* 264F25.96).

⁴⁷ Milo and Astylus of Croton, Iccus of Tarentum, Dicon of Caulonia (*DK* 1.446.14, 20, and 28 and *DK* 1.447.14). See Kirchner (1903) 582; cf. Oldfather (1921) 74 and Burkert (1972) 403 n. 12.

⁴⁸ Note, e.g., the absence of the victor of 520, Philip of Croton, who was exiled for his connection with the tyrant of Sybaris, Telys (Hdt. 5.47).

⁴⁹ Acron, a contemporary of Empedocles, wrote *On the Food of Healthy People* (*DK* 1.283.5). Cf. Thesleff (1965) 1ff. and Burkert (1972) 223 n. 25.

political followers of Pythagoras.⁵⁰ What is no less important, is that besides “associates” (γνώριμοι) he mentioned their distant descendants (ἀπόγονοι αὐτῶν ἀχρεὶ πολλῶν γενεῶν, fr. 17), which gives a very suitable context for appending to this work the list of the Pythagoreans, compiled on the basis of written and oral tradition. I would like to repeat that this was not a list of Pythagorean philosophers and scientists, although it embraces them too, but a list of the members of the Pythagorean *hetairiai* and their direct descendants. Indeed, Philolaus fled from Croton to Thebes, because he belonged to the ruling Pythagorean aristocracy, which was overthrown by the anti-Pythagorean outbreaks of the mid-fifth century, when “the best men in each city perished” (Polyb. 2.39.1, from Timaeus). Philolaus’ direct students were Aristoxenus’ teachers, the last Pythagoreans.

So, comparing the criteria used by Aristoxenus in compiling his list of Pythagoreans with those applied in modern works, I conclude that, beyond a critical approach to the sources, we enjoy no special advantages over the first historian of Pythagoreanism. The catalogue remains the primary source in determining who belonged to Pythagorean societies, and its data can be revised only if there is to hand *more* reliable evidence than it. In all other cases the person named in the catalogue should be accounted a Pythagorean, and *vice versa*. For example, Alcmaeon is on the list, which agrees with the fact that his book opened with an address to three Pythagoreans (24B1), one of whom, Brontinus, is known as Pythagoras’ contemporary and relative. Apart from Aristoxenus, a number of later authors also vouch for Alcmaeon’s Pythagoreanism.⁵¹ The tradition preserved by Diogenes Laertius affirms that he heard Pythagoras himself (8.83). Nevertheless, Alcmaeon’s belonging to the Pythagorean school has been more than once contested, one of the main arguments being that Aristotle did not call him a Pythagorean and made a distinction between his dualism and the dualism of the Pythagorean table of opposites.⁵² As I have

⁵⁰ Aristox. fr. 17 Wehrli and Neanth. *FGrHist* 84F30 = Porph. *VP* 55. See Minar (1942) 21 n. 25 and Burkert (1982) 14. In Aristox. fr. 50 Wehrli, γνώριμος, on the other hand, is simply an “acquaintance” of Archytas; see Huffman (2005) 318.

⁵¹ Iamb. *VP* 104, 267; Simplic. *In de An.* 32.3; Phlp. *In de An.* 88.11 and *schol. Plat. Alc.* 1 121e.

⁵² See, e.g., Zeller (1919) 601; Wachtler (1896) 88ff.; Ciaceri (1927) 73ff.; Heidel (1940) 3ff.; Guthrie (1962) 341ff. and Lloyd (1975) 125ff. (with a summary of previous opinions).

pointed out, Aristotle names no one as a Pythagorean, and it would have been strange if he had made an exception for Alcmaeon. Aristotle certainly drew a distinction between Alcmaeon's views and those of a particular group of Pythagoreans (ἕτεροι δὲ τῶν αὐτῶν τούτων, *Met.* 986a22f.). This group proposed as principles, not numbers, as the rest of the Pythagoreans did (985b23ff.), but ten pairs of opposing principles: limit — unlimited, odd — even, etc. Aristotle says "In this way Alcmaeon of Croton seems also to have conceived the matter, and either he got this view from them or they got it from him." If the words which follow, "for Alcmaeon was young in the old age of Pythagoras" (καὶ γὰρ ἐγένετο τὴν ἡλικίαν Ἀλκμαίων <νέος> ἐπὶ γέροντι Πυθαγόρα, 986a29-30), belong to Aristotle,⁵³ then he was inclined to believe, perhaps not without hesitation, that Alcmaeon lived before these Pythagoreans; hence he influenced them, not the reverse. Even if that text is not accepted, the conclusion that Alcmaeon lived before these Pythagoreans follows from the fact that he expressed himself "indefinitely" (ἄδιορίστως), whereas they indicated how many and what the opposites were (986b-3). Whatever the case, it is obvious, that the table of opposites comes not from Pythagorean, but from Academic sources.⁵⁴ Thus, paradoxically, Aristotle compares a theory of

⁵³ νέος is Diels's conjecture (*DK* 1.211.17). This phrase is absent from one of the manuscript traditions (Ab) and the commentary of Alexander of Aphrodisias, but has been preserved in a more reliable tradition (EJ) and in Asclepius' commentary (*In Met.* 39.21). Ross, who normally prefers EJ (Ross [1958] clxv), regarded these words as a late insertion. Wachtler (1896) 3ff. analysing this passage in detail, showed convincingly that the mention of Pythagoras is Aristotle's; he is followed by *DK* 1.211.17; Ciaceri (1927) 70; Timpanaro Cardini (1958) 1.125; Guthrie (1962) 342ff. and Dörrie (1970) 23. For Aristotle's chronology of Pythagoras, see fr. 75 and 191.

⁵⁴ "A continuous transition between Pythagorean and Platonic," Burkert (1972) 51. Aristotle twice connects the table with Speusippus (see above n. 7); after the first two pairs (πέρας-ἄπειρον, περὶτὸν-ἄρτιον), which are important both for the Pythagoreans and for Plato (cf. *Met.* 1004b33, where these two pairs are ascribed to different thinkers, according to most commentators, the Pythagoreans and Plato; see *Alex. In Met.*, 262.7), the third place is occupied by the pair ἔν-πλήθος, which is a cornerstone of Speusippus' philosophy (*Arist. Met.* 1092a35, 1087b4, b25 and 1085b5; see Tarán (1981) 33ff.) and the fifth by ἄρσεν-θῆλυ, which is attested among Xenocrates' principles (fr. 213 Isnardi Parente). The sixth and ninth pairs (rest and movement, good and bad) are, according to Aristotle, typically Platonic (*Met.* 1084a32ff.), whereas such opposites as cold-hot and moist-dry, which were really important for the Pythagorean thinkers (cf. Alcmaeon *DK* 24BB4, Menestor *DK* 32A3-5 and 7, Hippon *DK* 38A11 and Philolaus *DK* 44A27), are conspicuously absent in the table.

a real Pythagorean, without calling him a Pythagorean, with an Academic theory, calling its authors Pythagoreans! Who these “Academic Pythagoreans” were remains a mystery. If one desperately needs to see real figures behind Aristotelian Pythagoreans, one could think, for example, of Plato’s friends Amyclas and Cleinias.⁵⁵ But this is pure conjecture. More often than not I do not see real figures behind “the Pythagoreans” (Πυθαγόρειοι) of Aristotle.

Generally, we have to be very cautious concerning Pythagoreans unattested in Aristoxenus.⁵⁶ Diels basing the Pythagorean chapters of *Fragmente der Vorsokratiker* on the catalogue, extended the list of Pythagoreans to include some of those not in the catalogue. Hence in his collection the early Pythagoreans include Cercops (DK 15), Petron (DK 16), Paron (DK 26), and Xuthus (DK 33). However, according to Aristotle (fr. 75), the poet Cercops lived at the time of Hesiod and could not have been a Pythagorean.⁵⁷ As a Pythagorean he first appears in the book of the Hellenistic grammarian Epigenes (early 3rd cent.?), *On Works attributed to Orpheus*,⁵⁸ who ascribed to Cercops two Orphic poems, *Sacred Discourse* (Ἱερὸς λόγος) and *Descent into Hades* (Εἰς Ἅιδου κατάβασις). Epigenes’ evidence is clearly based on conjecture, as are all other similar indications. In Cicero a reference to Cercops is attached to a quotation from Aristotle, who believed that the poet Orpheus had never existed: “Aristotle tells us that the poet Orpheus never existed and the Pythagoreans report that this Orphic poem was the work of a certain Cercops” (*Orpheum poetam docet Aristoteles numquam fuisse et hoc Orphicum carmen Pythagorei ferunt cuiusdam fuisse Cercopis*, ND 1.107 = Arist. fr. 7). Only the first part of this

⁵⁵ When Plato wanted to collect all Democritus’ books and burn them, they persuaded him not to do so, explaining that too many people had copies of them (Aristox. fr. 131 Wehrli).

⁵⁶ According to the Peripatetic Clearchus, a younger contemporary of Aristoxenus, a certain Pythagorean named Euxitheus maintained that the soul was bound to the body as a punishment and resided in it until a god set it free (fr. 38 Wehrli). This fragment aside, we know nothing of the existence of the Pythagorean Euxitheus; he is clearly a fictitious figure (Burkert [1972] 124 n. 21), into whose mouth Clearchus placed a popular doctrine.

⁵⁷ Burkert (1972) 114 and 130 n. 60; cf. DK 1.106.6ff.

⁵⁸ Clem. *Strom.* 1.21.131 = test. 222 Kern. On Epigenes see Susemihl (1892) 1.344ff. Linforth (1941) 110ff. and 114ff. dated Epigenes to the fourth century, which is clearly too early. Cf. Nilsson (1955) 1.682.

evidence belongs to Aristotle, as is confirmed by a quotation in Philoponus, the second part deriving from Epigenes.⁵⁹ Aristotle could not have named as a Pythagorean a contemporary of Hesiod; it is no less material that no one at all was named by him as a Pythagorean.

We know of Petron only from a single quotation from Hippias of Rhegium transmitted by Phanias of Eresus. It is not known when Hippias lived (Phanias was Aristotle's pupil), and it is very probable that this evidence is spurious.⁶⁰ Paron, as Burkert has shown, appeared wholly as the result of an error by Aristotle, who mistook the participle ΠΑΡΩΝ for a proper noun.⁶¹ Xuthus is known only from a single mention by Aristotle (*Phys.* 216b22); in his commentary on this passage Simplicius calls Xuthus a Pythagorean, but this point cannot be checked. Since all three are absent from Aristoxenus' catalogue and nothing more is known of them, there are no grounds for regarding them as Pythagoreans.

In Diels' collection there are among the Pythagoreans of the fourth century six more names that must be erased from the Presocratics. Ocellus of Lucania (*DK* 48) is mentioned in the catalogue, which means that Aristoxenus accounted him a historical figure (cf. fr. 17), yet all the doctrines attributed to him are pseudo-Pythagorean. Thus the philosopher Ocellus is a fiction, as distinct from the Pythagorean Ocellus.⁶² Timaeus of Locri (*DK* 49) owes his existence to the Platonic dialogue and, later, to a pseudo-Pythagorean treatise.⁶³ Simus of Poseidonia (*DK* 1.447.6), mentioned in the catalogue, can hardly be identified with the harmonic theorist Simus (*DK* 56), the central figure in the story of the dedicatory gift of Arimnestus, the son of Pythagoras, related by Duris.⁶⁴ Myonides and Euphranor, who appear in the same section of Diels (*DK* 56), are also pseudo-Pythagorean fictions.⁶⁵ In the case of the last Pythagorean in Diels' collection, Lycon

⁵⁹ Kroll (1921) 314; Phlp. *In de An.* 186.21ff. = Arist. fr. 7 Rose.

⁶⁰ *FGrHist* 554F5 with comm. and Burkert (1972) 114 n. 35; Cf. however: Guthrie (1962) 322ff.

⁶¹ Burkert (1972) 170 and Martano (1980).

⁶² Thesleff (1965) 124ff. On the Italic Pythagoreans see Mele (1981).

⁶³ Thesleff (1965) 202ff.

⁶⁴ *FGrHist* 76F23 = *DK* 14A6 = 56A2. Arimnestus is clearly invented, as probably is Simus, who was supposed to have stolen the Pythagorean κανών.

⁶⁵ In Atheneus (4.182c, 184e; 14.634d = *DK* 44A7 and 47B6) Euphranor, along with Philolaus and Archytas, is called the author of *On Auloi* (Περὶ αὐλῶν), which

(DK 57), we are evidently dealing with four different people. Since Lycon of Tarentum, named in the catalogue (DK 1.446.23), cannot be identified with the other three,⁶⁶ only his name remains. Other scholars have gone further than Diels. The editions by Maddalena and Timpanaro Cardini list as Pythagoreans Epicharmus, Ion of Chios, Damon of Athens, Hippodamus of Miletus, the sculptor Polyclitus, and also Oenopides and Hippocrates of Chios.⁶⁷ Not only are these not named in the catalogue, but also not a single source of the classical period calls them Pythagoreans or pupils of Pythagoreans.

I think that Diels was also somewhat too generous regarding Aristoxenian material in Iamblichus.⁶⁸ Several items in section 58D, entitled “From Aristoxenus’ *Pythagorean Precepts* and *Pythagorean Life*” certainly do not go back to Aristoxenus, e.g., the greater part of 58D1 = Iamb. VP 164–6 (only VP 163 contains authentic material), and the whole of 58D2 = VP 137. At the same time, VP 163 = 58D1.4 has a splendid parallel, which apparently stems from Aristoxenus, to the ironic words of Isocrates about Pythagoras and his pupils. Isocrates notes:

He so exceeded others in fame that all the young desired to become his students, and older people were more pleased to see their children conversing with him than attending to their own affairs. We must believe this. Even now people admire those who claim to be his students more even when they are silent than those men who have the greatest reputation for speaking.⁶⁹

seems to be a pseudo-Pythagorean work; see Thesleff (1965) 85. Iamblichus (*In Nic.* 116.4ff.) attributes to Myonides and Euphranor the discovery of the four means, which in reality were discovered by Eratosthenes; see Zhmud (2006) 174; cf. Burkert (1972) 455 n. 40 and 442 n. 92.

⁶⁶ See Susemihl (1892) 330ff. and 691ff.; Thesleff (1965) 109ff.; Burkert (1972) 204 and *FGrHist* 1110 with comm.

⁶⁷ Maddalena (1954). Timpanaro Cardini (1964) 3.334ff. places Epicharmus, Damon, and Hippodamus in the section “Risonanze Pitagoriche”; cf. Zeller (1919) 607ff. See also Huffman (2002).

⁶⁸ Iamblichus made extensive use of Aristoxenus’ *Pythagorean Precepts*; see Rohde (1901) 141ff., who argues that Nicomachus was the intermediary, and Burkert (1972) 101, who suggests that Iamblichus used Aristoxenus directly. Burkert attributes Iamb. VP 101–2, 174–6, 180–2, 200–13 and 230–3 to the *Precepts*.

⁶⁹ ἔτι γὰρ καὶ νῦν τοὺς προσποιουμένους ἐκείνου μαθητὰς εἶναι μᾶλλον αἰγῶντας θαυμάζουσιν ἢ τοὺς ἐπὶ τῷ λέγειν μεγίστην δόξαν ἔχοντας (*Bus.* 29).

What is meant by “when they are silent” (σιγῶντας) in this context? Is the silence the legendary Pythagorean vow of silence, secrecy in teaching, or taciturnity and restraint in speech⁷⁰ set against the art of the best orators (among whom Isocrates probably counted himself)? Secret doctrines generate suspicion, rather than admiration; pedagogical silence, if practiced without moderation, would also produce perplexity and taunts,⁷¹ whereas restraint in speech was something the Greeks really did admire. What would the Pythagoreans have had to hide in the 390s (ἔτι γὰρ καὶ νῦν plainly refers to the contemporaries of Isocrates), when Philolaus, who had supposedly made public the school’s secrets, had died, and Archytas was publishing one treatise after another? A parallel from Aristoxenus points in a more promising direction: “The Pythagoreans were much given to silence and ready to listen, and the one who was able to listen was praised by them.”⁷² Moreover, it was Aristoxenus who held Archytas’ self-control and restraint to be among his most important qualities: in situations in which others would deliver fiery perorations, he remained calm and said nothing.⁷³ It is highly probable that when Isocrates wrote of Pythagorean restraint he was thinking of Archytas, since his polemics with Archytas are reflected in the same speech.⁷⁴

Another alleged piece of evidence for Pythagorean secrecy are the following words of Aristoxenus: “And the rest of the Pythagoreans said that not all things were to be spoken to all people.” (ἐλεγόν τε καὶ οἱ ἄλλοι Πυθαγόρειοι μὴ εἶναι πρὸς πάντας πάντα ῥητά, fr. 43 Wehrli). What this sentence meant is clear, first, from the title of the work in which it appeared, *Laws of Pedagogy* (Παιδευτικοὶ

⁷⁰ Timpanaro Cardini (1958) 1.27: “contegno riservato”; Philip (1966) 146: “taciturnity.”

⁷¹ Xenocrates devoted one hour a day to silence (D.L. 4.11, see also Val. Max. 7.2 ext. 6 and Stob. 3.33.11 = fr. 61–2 Isnardi Parente), which was evidently considered a worthy activity (whether or not this story is true; Valerius Maximus speaks of restraint in speech). The Pythagoreans were supposed to maintain silence for five successive years!

⁷² σιωπηλοὺς δὲ εἶναι καὶ ἀκουστικοὺς καὶ ἐπαινέσθαι παρ’ αὐτοῖς τὸν δυνάμενον ἀκοῦσαι (Iamb. VP 163 = DK 58D1.4)

⁷³ Fr. 30 Wehrli: when angry the Pythagoreans did not punish their slaves or admonish freemen; instead they waited quietly and silently (σιωπῇ χρώμενοι καὶ ἡσυχίᾳ) until able to think rationally.

⁷⁴ *Bus.* 23, on the value of a mathematical education. See Zhmud (2006) 74.

νόμοι), and second, from the reference to Xenophilus which follows it. Xenophilus was Aristoxenus' mentor, and another pedagogical maxim is placed in his mouth. In this context, the advice "not to tell everybody everything" may mean: "one should not say the same things to children (or adolescents) as to adults."⁷⁵ Even if we understand these words in a broader sense, "one should not blurt out all one's secrets too freely," this sensible advice, which Aristoxenus takes from the mid-fourth-century Pythagoreans, still need not imply secrecy in Pythagoras' teaching. The precepts of the Seven Sages, whom nobody seems to have suspected of secret teaching, are full of such advice.⁷⁶ Since Aristoxenus consistently avoided reporting anything about the Pythagoreans that went beyond the accepted norms of his day, he could hardly have meant anything other than the folk wisdom enshrined in the pronouncements of the sages. In general Aristoxenus' writings, especially the *Pythagorean Precepts*, have much in common with traditional wisdom.⁷⁷ It seems that quite often he felt free to claim it for the wisdom of the Pythagoreans.

To Aristoxenus' fr. 43 about Pythagorean education, discussed above, Wehrli attached the preceding words of Diogenes Laertius on the secrecy of the teaching until the time of Philolaus (8.15).⁷⁸ This is

⁷⁵ In the light of the tradition on Pythagoras' speeches addressed to groups of differing age and sex (Antisthenes fr. 51 Decleva Caizzi; Dicaearchus fr. 33 Wehrli and Timaeus *ap.* Justin 20.4), this interpretation seems highly likely. Aristoxenus also mentions the different responsibilities of the four age groups: children, adolescents, adults, and old people (fr. 35 Wehrli).

⁷⁶ Stob. 3.1.172 = DK 10A3, from the collection of the Peripatetic Demetrius of Phaleron. Cleobulus: "Listen much and say little" (4, cf. 6: "Keep your tongue in check"); Solon: "Seal your words with silence, and silence with the seal of the fitting moment" (5); "If you know, keep silent!" (18); Chilon: "When drinking, do not talk too much; you will regret it" (2); "Do not let your tongue overtake your mind" (14; cf. D.L. 1.69: "What is hard? To keep a secret"); Bias: "Listen much, and speak at the right moment" (10–11, cf. 4 and 17), Periander: "Betray no secret speeches" (14).

⁷⁷ Cf., e.g., respect for one's parents: Cleobulus (2), Thales (6), Periander (10) and Aristox. fr. 34 Wehrli, cf. also Xen. *Mem.* 4.4.19; controlling one's anger: Chilon (15) and Aristox. fr. 30 Wehrli; the primacy of old laws over new ones: Periander (16) and Aristox. fr. 33–4 Wehrli; criticism of lack of moderation: Cleobulus (10 and 17), Thales (12) and Aristox. fr. 17 Wehrli.

⁷⁸ "Until the time of Philolaus, it was not possible at all to learn the Pythagorean teaching. But he alone brought fourth the famous three books which Plato asked in a letter to be bought for 100 minae" (tr. Huffman).

clearly wrong: the quotation from Aristoxenus begins with “and the rest of the Pythagoreans said” (ἐλεγόν τε καὶ οἱ ἄλλοι Πυθαγόρειοι; fr. 36–8 and 41 also begin with “they said” [ἐλεγον, ἔφασκον, ἔφασαν]). What we have in Diogenes is yet another clumsy attempt to meld together two different sources and thus confirm the secrecy of Pythagorean teaching. Apart from anything else, Aristoxenus could not have written of “three books” (τρία βιβλία) published by Philolaus, because the pseudo-Pythagorean tripartitum appeared at the end of the third century.⁷⁹ In the fifth- and fourth-century sources we find not one word about the oral nature of Pythagoreanism before Philolaus.

⁷⁹ See Burkert (1972) 226 n. 40.

Aristoxenus' *Life of Socrates**

Carl Huffman

1. Introduction

Scholars attempting to discover the historical Socrates have relied mostly on Plato with a bow towards Xenophon and a glance at Aristophanes. None of these authors themselves were primarily interested in providing an *historical* account of Socrates, however, and some scholars now regard the search for such an account as futile.¹ There has been surprising neglect of a source who has, *prima facie*, a much better claim to our attention, if we are searching for the Socrates

* An earlier version of this paper was presented at the International Socrates Symposium and 27th Annual Workshop in Ancient Philosophy, Texas Christian University, April 1–3, 2004. Initially, I planned to publish it as a journal article and received some very helpful comments from an anonymous reader as part of that process. Stefan Schorn's paper for this volume was developed completely independently of my paper and he did not see my paper until after he had written his contribution. It is striking and reassuring that our independent research led to similar conclusions, although, as the reader will see, we do not agree on every point and in some cases use different approaches to the evidence.

¹ See, e.g., Prior (2001).

of history, since he sets out precisely to write the first biography of Socrates. It is certainly the case that early Greek biography may not have held to strict historical standards. It may have had purposes that went beyond or even conflicted with the goal of historical accuracy. Nonetheless, a life would appear to be closer to history than a Platonic dialogue.² The author of this first biography of Socrates is Aristoxenus of Tarentum, the great music theorist, member of the Lyceum under Aristotle and the subject of this volume of essays. The reason that so little attention has been paid to Aristoxenus is not far to seek. Even the editor of the fragments of Aristoxenus, Wehrli, calls Aristoxenus' treatment of Socrates "libelous."³ Guthrie describes Aristoxenus as a "curiously sour character," whose account is gossipy and "bears the marks of malice and scandal."⁴ Burnet refers to "the scandal-monger Aristoxenus."⁵ More recently Villari assumes that his "clear distaste for Socrates" has been proven.⁶ If you would like to learn how to say "malicious gossip" in German, you can consult German scholarship on Aristoxenus (the German expression is *bösartigen Klatsch*).⁷ Even scholars such as Fitton and Bicknell who argue that Aristoxenus is correct in his account of Socrates on specific points, accept his "indubitable malignitas."⁸ Most modern treatments of Socrates, such as those of Vlastos⁹ and Nehamas,¹⁰ apparently assume that Aristoxenus has been put in his place and do not bother to mention him. His marginalization is complete in the collected papers by leading scholars published in honor of the 2,400th anniversary of Socrates' death. These papers deal with a great variety of representations of Socrates but do not mention Aristoxenus even once.¹¹ Similarly, his name does not appear in the index of the 533-page *Companion to Socrates* published by Blackwell.¹² The purpose of my paper is to call this marginalization into

² See Momigliano (1993).

³ Wehrli (1967) 65.

⁴ Guthrie (1969) 390.

⁵ Burnet (1914) 129 n. 2.

⁶ Villari (2000) 446.

⁷ See, e.g., Gomperz (1987) 184.

⁸ Bicknell (1974) 2. See Fitton (1970) 58 "hostile," 59 "bias" and 65 "offensive."

⁹ Vlastos (1991) and (1994).

¹⁰ Nehamas (1998).

¹¹ Judson and Karasmanis (2006).

¹² Ahbel-Rappe and Kamtekar (2006).

question, to doubt the indubitable malice of Aristoxenus and to argue that it is far from clear that Aristoxenus presented even a particularly negative account of Socrates, let alone a scandalous, libelous or malicious one.

To begin with, I want to offer some clarifications. First, my focus is historical and philological rather than philosophical. One reason for the neglect of Aristoxenus' *Life of Socrates* is that most scholars are interested in an historical account of Socrates' philosophical views, for which Aristoxenus does not provide much help, and not of his life proper, which was Aristoxenus' focus. Yet, in the case of Socrates as of few other philosophers, the connection between his philosophical views and his way of life has been thought to be intimate and important.¹³ Accordingly, Aristoxenus' portrait of Socrates is still crucial reading for historians of philosophy. Second, what I have to say is even more important for our understanding of Aristoxenus than it is for our understanding of Socrates. If my thesis is true, it contributes to the rehabilitation of Aristoxenus as a source for other philosophers whose lives he wrote: Pythagoras, Plato and Archytas. This emphasis on Aristoxenus is salutary. Most scholars only come to Aristoxenus out of an interest in the figures he is writing about and have thus only viewed him as one among many sources for a specific aspect of their lives and have not looked at his testimony as a whole and on its own. Much excellent scholarship has been devoted to Aristoxenus' work on music, but such scholarship has little to say about Aristoxenus as a biographer and historian.¹⁴ Finally, I am not arguing that Aristoxenus' account of Socrates' life and character is historically correct in all aspects. The historical issues are simply too complicated to sort out in a short article such as this. I should note, however, that Stefan Schorn's paper in this volume argues that in important respects Aristoxenus is closer to the historical realities than Socratics such as Plato are. My contention is more limited: there is no reason to dismiss

¹³ See Frede (2006) 189: "The example Socrates set with his actual life ... must have been a crucial part of what amazed and attracted his immediate followers"

¹⁴ A brilliant and authoritative discussion of Aristoxenus as a harmonic theorist is to be found in Barker (2007). See also Gibson (2005). Barker mentions the biographies in only one sentence describing the biographies of Plato and Socrates as "thoroughly gossipy, not to say scurrilous" (115). Gibson refers to the biographies in just a couple of paragraphs and takes the standard line that Aristoxenus allows "personal prejudice to color his presentation" and "plainly dislikes" Socrates and Plato (126).

Aristoxenus' account of Socrates out of hand as malicious gossip, which has been the dominant scholarly approach. I am arguing against conclusions such as that of Woodbury in his 1971 article that "What cannot be doubted is the character of Aristoxenus himself. His own testimony is more than sufficient to convict him as a sensation-seeker and muckraker whose guide is a malicious and infirm judgment."¹⁵

Before looking at the specifics of Aristoxenus' testimony, I want to emphasize the potential importance of his account of Socrates. There might be a tendency to dismiss him as a later and derivative source in comparison to first-hand sources such as Plato and Xenophon, since he was born around 375 BCE, some twenty-five years after Socrates died. Two points need to be made here. First, since he is writing a life of Socrates, a *bios*, he may well have done more justice to Socrates' life as a whole than Socrates' younger contemporary Plato, who was primarily using the figure of Socrates for his own philosophical purposes. He may have scoured all available written and oral sources for the life of Socrates. Thus, he may be a very well informed derivative source, who gives us information on aspects of Socrates' life that Plato chose to neglect. Second, Aristoxenus appears to have had some first hand information about Socrates, which was independent of Plato and Xenophon and not readily available to others. Spintharus, Aristoxenus' father and teacher (fr. 1 Wehrli),¹⁶ is said to have been an associate of Socrates and is cited as one of Aristoxenus' primary sources (fr. 54a Wehrli).¹⁷ The chronology just works out. If we suppose that Spintharus was born in 425 BCE, he could have associated with Socrates in Athens between the ages of eighteen and twenty-five (407–400) and still have been the father of Aristoxenus at fifty in 375 and available at age seventy to tell a twenty-year old Aristoxenus about his experiences with Socrates. Spintharus' account of Socrates thus has the potential to provide some insight into Socrates that is independent of Plato and Xenophon.

¹⁵ Woodbury (1971) 303.

¹⁶ All fragments of Aristoxenus will be cited from Wehrli (1967).

¹⁷ In the *Suda*, Aristoxenus is identified as the son of Mnesios or of Spintharus, but Spintharus is taken to be his father in most later sources (e.g., D.L. 2.20 and SE, *M.* 6.1). Wehrli (1967) 47 suggested that, since Spintharus is also cited as his teacher and used as a source, it may be that Spintharus is just a teacher and that Mnesios is his real father.

The most fundamental point in assessing Aristoxenus' *Life of Socrates* is to recognize that we have only a few fragments from it. It is hard to know the general character of the treatise on that basis. We must not assume that we know that general character, when we do not. There are too many different ways of putting the fragments together simply to dismiss their evidence as gossip. Comments that are commonly cited as negative, when viewed in the contexts that do survive, turn out to be far less critical of Socrates than typically assumed, as I will show below. It is important to remember that the same may be true for comments for which we have no context. The fragmentary nature of the evidence can also contribute to misunderstanding the nature of Aristoxenus' *Life* in another way. The selection of the fragments, which have been preserved from the *Life*, is heavily influenced by the purposes of the authors who quote the fragments. The misrepresentation of the character of the original text introduced by the purposes of the quoting author has been shown in the case of other fragmentary authors.¹⁸ An interesting parallel to Aristoxenus as a biographical source is provided by Stesimbrotus of Thasos and Ion of Chios, who are regularly regarded as biased sources hostile to Pericles.¹⁹ This judgment is largely based on Plutarch's presentation of them, yet this same Plutarch makes eager use of Ion and Stesimbrotus in his *Life of Cimon*. As Pelling has shown, Plutarch, in fact, constructs two different Ions depending on his purposes, and it is misguided to assume that either of these Ions represents an accurate portrayal of Ion's real procedures in biography.²⁰ Thus, in what follows it will be important to study the purposes of the authors who quote Aristoxenus in order to see how they have influenced modern assumptions about both Aristoxenus' procedures as a biographer and also the nature of his *Life of Socrates*.

2. Aristoxenus' Reputation in the Ancient Tradition

Someone might object that, although *we* are not in a position to determine the overall character of Aristoxenus' work on the basis of the limited evidence for its contents, ancient sources surely had access to

¹⁸ Osborne (1987) and Brunt (1980).

¹⁹ See, e.g., the OCD articles on each author.

²⁰ Pelling (2007a).

the whole work and we should accept *their* analysis that Aristoxenus was malicious. So far as I can see, there are just two passages in the ancient tradition, in which Aristoxenus is asserted to have been hostile to Socrates, both of which are relatively late. In the treatise *On the Malignity of Herodotus* (9 856c-d = fr. 55 Wehrli), which is assigned to Plutarch, Aristoxenus is cited as someone who includes some positive remarks about Socrates so that his slander will be accepted:

ἐγγὺς δὲ τούτων εἶσιν οἱ τοῖς ψόγοις ἐπαίνους τινὰς παραιθέμεντες, ὡς ἐπὶ Σωκράτους Ἀριστόξενος, ἀπαίδευτον καὶ ἀμαθὴ καὶ ἀκόλαστον εἰπὼν, ἐπήνεγκεν “ἀδικία δ’ οὐ προσήν.” ὥσπερ γὰρ οἱ σὺν τινι τέχνῃ καὶ δεινότητι κολακεύοντες ἔστιν ὅτε πολλοῖς καὶ μακροῖς ἐπαίνουσι ψόγους παραμιγνύουσιν ἐλαφροῦς, οἷον ἡδυσμα τῇ κολακείᾳ τὴν παρηρησίαν ἐμβάλλοντες, οὕτω τὸ κακὸς εἰς πίστιν ὧν ψέγει προϋποτίθεται τὸν ἔπαινον.

6 προϋποτίθεται] *Abresch* προαποτίθεται *codd.*

Akin to these (sc. writers) are those who put praise alongside their censures, as Aristoxenus in the case of Socrates, having said that he was uneducated, ignorant and without self-control, added “but there was no injustice involved.” For just as there are occasions when those who flatter with some art and skill mix some mild censures with great and extended praise, adding frankness to their flattery as a spice, so malignity lays down a foundation of praise beforehand so that its abuse will be believed.

Thus, according to Plutarch, Aristoxenus describes Socrates as “without self-control” but in order to get the reader to accept this characterization also notes in Socrates’ favor that “there was no injustice involved.” This analysis appears to be based largely on a section of Aristoxenus’ life that survives (fr. 54a and 54b Wehrli), so that we are in a position to evaluate his interpretation, which I will do later in this essay. The charge that Aristoxenus portrayed Socrates as uneducated and ignorant cannot as easily be compared with a surviving fragment.²¹ It may well be, however, that Plutarch is referring to Aristoxenus’

²¹ In his essay in this volume, Schorn suggests that the reference may be to Theodoret 1.29, where Socrates is described as “lacking talent in no respect” but “uneducated in every respect.” Schorn argues that this passage is derived from Aristoxenus, although it is not included in Wehrli’s collection of fragments.

report that Socrates trained in his father's profession of stonecutting (See fr. 51 Wehrli below). As will be shown below, both Cyril of Alexandria and Porphyry will defend Socrates on the grounds that such a profession does not hinder one from attaining wisdom, so that some readers may have seen such training as indicative of ignorance and lack of education. If Aristoxenus' portrayal of Socrates as a stonecutter is the basis for Plutarch's remarks, however, it is doubtful that this is a correct reading of Aristoxenus. We know that elsewhere Aristoxenus identified Socrates as a pupil of the philosopher Archelaus (See fr. 52 a and 52b Wehrli below), which would hardly be consistent with a strategy of presenting him as uneducated. The crucial point is that what Plutarch says about Aristoxenus' malignity may be based mostly on evidence that survives and where we can evaluate his interpretation. There is no clear evidence that Plutarch appealed to some portion of the *Life of Socrates* that, although lost to us, showed conclusively that it was malicious in intent.

In evaluating Plutarch's comment about Aristoxenus here, it is also important to take into account the nature of the work in which it appears, *On the Malignity of Herodotus*. Plutarch tends to express himself in the most extreme ways in this essay. For example, his presentation of Herodotus in it has been shown to be in strong contrast with much more favorable presentations of Herodotus elsewhere in his works.²² The same point applies to his treatment of Aristoxenus. In his treatise, *That Epicurus Actually Makes a Pleasant Life Impossible* (1093b), Plutarch is far from warning the reader away from Aristoxenus because of his malice and abuse. He says:

ὅταν δὲ μηδὲν ἔχουσα βλαβερὸν ἢ λυπηρὸν ἱστορία καὶ διήγησις ἐπὶ πράξεσι καλαῖς καὶ μεγάλαις προσλάβῃ λόγον ἔχοντα δύναμιν καὶ χάριν, ὥς τὸν Ἡροδότου τὰ Ἑλληνικὰ καὶ τὰ Περσικά τὸν Ξενοφώντος ... ἢ ὡς Περιόδους Εὐδοξος ἢ Κτίσεις καὶ Πολιτείας Ἀριστοτέλης ἢ Βίους ἀνδρῶν Ἀριστόξενος ἔγραψεν, οὐ μόνον μέγα καὶ πολὺ τὸ εὐφραίνειν ἀλλὰ καὶ καθαρὸν καὶ ἀμεταμέλητόν ἐστι.

But whenever the historical narrative has nothing harmful or painful in it and adds to great and glorious deeds an account possessing power and charm, as the Greek history of Herodotus or the Persian

²² See Pelling (2007).

history of Xenophon ... or Eudoxus' *Description of the World* or the *Foundations and Constitutions* of Aristotle or the *Lives of Men* of Aristoxenus, the joy given is not only great and abundant but pure and without regret.

Thus he includes the *Lives* of Aristoxenus in a list of works described as containing accounts that involve "nothing harmful or painful" and which provide not only "great and abundant enjoyment" but also enjoyment that is "pure and without regret" (1093b-c). Certainly, Plutarch here, despite his reference to Aristoxenus' malice in *On the Malignty of Herodotus*, does not dismiss the *Lives* of Aristoxenus as a source hopelessly distorted by malice as modern scholars have done and is clearly recommending them as valuable reading. It is unfortunate then that scholars have relied on the one comment of Plutarch to dismiss Aristoxenus and ignored Plutarch's overwhelmingly positive evaluation of Aristoxenus elsewhere.²³

The second passage in the ancient tradition that appears to assert that Aristoxenus was hostile to Socrates comes from a fragment of Porphyry's *History of Philosophy* quoted by Cyril of Alexandria (*Against Julian* 6.208 = fr. 51 Wehrli). Here again it is important to note the purposes for which the passage is quoted. Cyril quotes Porphyry in response to attacks on Christianity by Julian, who emphasized that many Christians were slaves or had servile occupations. Cyril's point is that the poor and those of lower rank in society can still be wise and excel in virtue. His strategy in responding to Julian's attack is to point out that a pagan famed for his wisdom and virtue, Socrates, had the lowly occupation of a stonecutter and was born of a father who had that same occupation and a mother who worked as a midwife. His choice of Porphyry for evidence of Socrates' background is part of the strategy, since Porphyry, like Julian, wrote a famous attack on Christians. Cyril quotes from the beginning of Porphyry's discussion of Socrates where he shows even this pagan apologist saying that Socrates' working as a stonecutter "has nothing to do with his wisdom."

Cyril then indicates that he is skipping to a later point in Porphyry's account of Socrates. Here, Porphyry reports, on the authority

²³ In his essay in this volume, Schorn comes to a similar conclusion about Plutarch's presentation of Aristoxenus on the basis of a much more thorough discussion of the relevant passages than I have undertaken here.

of the historian Timaeus, that Socrates learned the art of stone cutting from his father and then goes on to give further evidence supporting this view, in the course of which he mentions Aristoxenus:

γράφει δὲ οὕτω περὶ αὐτοῦ (sc. Σωκράτους) Πορφύριος ἐν τῷ τρίτῳ φιλοσόφου ἱστορίας ... δημιουργὸν γὰρ γενέσθαι τὸν Σωκράτην, πατρὶα τέχνῃ χρώμενον τῇ λατυπικῇ. καὶ Τίμαιος ἐν τῇ ἐνάτῃ λιθοουργεῖν φησι μεμαθηκέναι Σωκράτην. εἰ δὲ ὁ μὲν <Αριστόξενος> διὰ δυσμένειαν <ἀν>αξιόπιστος, Τίμαιος δὲ διὰ ἡλικίαν, νεώτερος γὰρ ὁ Τίμαιος, Μενεδήμεν τῷ Πυρραίῳ χρηστέον, Πλάτωνος μὲν γεγονότι μαθητῇ, πρεσβυτέρῳ δὲ γεγονότι Ἀριστοξένου, λέγοντι ἐν τῷ Φιλοκράτους, ὅτι οὐκ ἐπαύετο Σωκράτης οὔτε ὑπὲρ τοῦ πατρὸς ὡς λιθοουργοῦ λαλῶν, οὔτε ὑπὲρ τῆς μητρὸς ὡς μαίας. (*Against Julian* 6. 208 = fr. 51 Wehrli)

5 <Αριστόξενος>] Wehrli (1st ed.) <ἀν>αξιόπιστος] ?Mk ("et si quidem ille minus fide dignus est" Oec.) Röper *Philologus* 1854, 37 ἀξιόπιστος codd. cett. <μὴ> ἀξιόπιστος Aubert Migne 6 Τίμαιος] Wehrli Ἀριστόξενος codd. 8 Φιλοκράτους] B^{mc}(p. corr.) Jacoby !Φιλοκράτους! Smith Φιλοκράτου MB(a. corr.) Φιλοκράτ* F Φιλοκράτη E Φιλοκράτει Kinzig περὶ Σωκράτους Nauck [I would like to thank Wolfram Kinzig for making available the sections of his forthcoming edition of Cyril's *Against Julian* which include fr. 51 and fr. 54a, which is discussed below.]

Porphry writes thus about him (sc. Socrates) in the third book of his *History of Philosophers* ... For Socrates became a craftsman, employing his father's art, that of stone cutting. Timaeus also, in his ninth book, says that Socrates learned to work stone. If we cannot trust <Aristoxenus> because of his enmity and Timaeus because of his age, for Timaeus is younger, we must use Menedemus of Pyrrha, who became a pupil of Plato and was older than Aristoxenus, when he says, in the *Philocrates*, that Socrates never stopped talking either about his father as a stone-worker or his mother as a midwife. (*Against Julian* 6.208 = fr. 51 Wehrli)

The text is corrupt and Aristoxenus' name in the crucial sentence is an emendation. If we accept this emendation and despite the obscurity of the text assume that it is assigning enmity towards Socrates on the part of Aristoxenus, it is still difficult to put much emphasis on this text for two reasons: 1) It is not clear that Porphyry *himself* regarded Aristoxenus as a hostile witness. He asserts "if we cannot trust Aristoxenus because of his enmity ... we must use Menedemus." He may know

that some people, for example Plutarch, regarded him as a hostile witness, without making such a judgment himself.²⁴ Porphyry appears to have used Aristoxenus extensively in his account of Socrates (See Aristoxenus fr. 54a and 54b Wehrli), which is odd if he regarded him as an unduly hostile witness. 2) The import of the passage in Porphyry is not to show that Aristoxenus was a hostile witness but rather that, whatever one might think of Aristoxenus, the evidence of Menedemus shows that Socrates did learn his father's art of stonecutting as Aristoxenus maintained.²⁵ This passage of Porphyry thus, in fact, supports the accuracy of Aristoxenus' account of Socrates on this point.

Thus, neither the passage in Plutarch nor this passage in Porphyry constitutes decisive external evidence that Aristoxenus' *Life of Socrates* was malicious. Yet, these two problematic passages are the only external evidence for Aristoxenus' malice. They are counterbalanced by other very positive assessments of Aristoxenus as a biographer. We have already seen that Plutarch elsewhere treats Aristoxenus' *Lives* as recommended reading that involves "nothing harmful." In addition, the Roman biographer Suetonius describes Aristoxenus as "by far the most learned" (*longe omnium doctissimus*) of all the Hellenistic biographers, and it seems doubtful that Suetonius would have praised Aristoxenus in this way, if he thought his biographies were simply malicious gossip.²⁶ On the whole then, the external evidence for Aristoxenus as a biographer is as much positive as negative.²⁷ What of the internal evidence from the *Life of Socrates*?

3. Aristoxenus' Account of Socrates

Wehrli collects twelve fragments and testimonia as coming from the life, and it is impossible to examine all of them in detail here. The information presented in some of the testimonia is largely

²⁴ Here I disagree with Schorn, who in his essay in this volume thinks it is clear that Porphyry regards Aristoxenus as hostile to Socrates.

²⁵ It is difficult to say anything about Porphyry's purposes in his *History of Philosophy*, because that work is so fragmentary. It does appear that he gave a detailed treatment to Socrates and did not introduce him simply in the context of a discussion of Plato.

²⁶ Fr. 1 Reifferscheid. This fragment is derived from Jerome, *Hier. vir. ill. praef.* 1–2, which shows that Jerome agreed with Suetonius' positive assessment of Aristoxenus.

²⁷ For a fuller treatment of the external evidence see Schorn's essay in this volume.

non-controversial, for example, that Anytus was one of the accusers of Socrates (fr. 60 Wehrli) or that Socrates was the pupil of Archelaus (fr. 52a and 52b Wehrli). The latter fact is supported by the fifth-century source Ion of Chios (D.L. 2.23) and by most²⁸ but not all scholars,²⁹ and there is nothing obviously malicious about it. As we have seen, in fr. 51 Wehrli Aristoxenus is cited as evidence that Socrates practiced his father's art as a stonecutter or sculptor. Such a profession could be belittled as banausic from an aristocratic perspective, as the context of fr. 51 suggests, but there is no evidence that Aristoxenus belittled it or did anything more than state the fact. Many scholars have taken the passage in Plato's *Euthyphro* (11b-c), where Socrates' compares his, or rather Euthyphro's, verbal creations to the sculptures of his ancestor Daedalus, to confirm that Socrates worked with stone at some point in his life.³⁰ Nothing in the *Euthyphro* passage suggests that Plato thought it belittling to Socrates to associate him with stone cutting or sculpture. Whether we conclude that Socrates was a stonecutter or not, there is no evidence that Aristoxenus ascribed this profession to him out of malice; if his father, Sophroniscus, was a stonecutter, it is only natural to expect that he did receive some training in the art.

More problematic is Aristoxenus' assertion in fr. 59 (= D.L. 2.20):

φησὶ δ' αὐτὸν (sc. Σωκράτην) Ἀριστόξενος ὁ Σπινθάρου καὶ
 χρηματίσασθαι. τιθέντα γοῦν τὸ βαλλόμενον κέρμα ἀθροίζειν,
 εἶτα ἀναλώσαντα πάλιν τιθέναι.

3 ἀναλώσαντα] *codd.* διπλώσαντα *Crönert*

Aristoxenus son of Spintharus says that he (sc. Socrates) even (also?) engaged in business for his own profit. At least, by investing he collected the money that accrued, and then, when he had spent this, he invested again.

The structure of the context in which this fragment is quoted in Diogenes Laertius is rather loose and Diogenes' thought process is associative rather than strictly logical so that it is not precisely clear why he cites this assertion of Aristoxenus. Moreover, the καί in the first

²⁸ See Graham (2007), Guthrie (1969) 422 and Lacey (1971) 27.

²⁹ Woodbury (1971). Brickhouse and Smith (1989) 18 seem to accept the connection with Archelaus but to deny that Socrates was much influenced by it.

³⁰ See Guthrie (1969) 378. Burnet (1924) 50 makes the opposing case.

sentence can be interpreted in at least two ways. Diogenes begins his *Life* with Socrates' parentage but jumps quickly to the claim that he helped Euripides write his plays. He then turns to his education, mentioning Anaxagoras, Damon and Archelaus as teachers before citing Duris' report that he was a slave and engaged in stonework. The mention of his work in sculpture leads Diogenes to quote Timon's satirical verses on Socrates, which call him a sculptor but then mention his skill in argument. With this cue Diogenes presents reports about Socrates' speaking skill, including that he was the first to teach rhetoric. We might think that the citation from Aristoxenus, which follows after one intervening sentence, provides another means, in addition to teaching rhetoric by which Socrates supported himself, but Diogenes does not really use the teaching of rhetoric to explain how Socrates supported himself but as part of the evidence for his power as a speaker. Moreover, the sentence that intervenes between the mention of his teaching rhetoric and the reference to Aristoxenus has nothing to do with his support for himself but instead assigns him two "firsts," that he was the first to discourse on how to live one's life and the first philosopher who was tried and put to death. In this context of "firsts" it is perhaps best to interpret the καί not as "also" but as Diogenes' incredulous "even": "Aristoxenus says that he even engaged in business."

Diogenes gives us little help in fixing the original context in Aristoxenus' *Life of Socrates* for this remark about his money-making, but it seems plausible that it is part of an attempt to explain how Socrates supported himself, in light of Plato's insistence that Socrates did not make any money from teaching. Some scholars immediately conclude that Aristoxenus is presenting Socrates as a usurer.³¹ A passage in Aristotle's *Politics* does indeed assert that any sort of interest earned for loaning money is unnatural and that usury (ὀβολοστατική) is hated with very good reason (1258b2–8). It is important to note, however, that Aristoxenus does not suggest that Socrates charged exorbitant amounts of interest and does not use a morally loaded term such as Aristotle's ὀβολοστατική to describe Socrates' practice but rather the neutral term "to make money" (χρηματίζομαι). Aristotle himself recognizes legitimate forms of moneymaking (χρηματιστική, 1258a15). Moreover, the conversation between Socrates and Cephalus in *Republic* I suggests that moneymaking is not necessarily an evil.

³¹ Patzer (1987) 4.

Plato presents Socrates as critical of those who devote their lives to moneymaking on the grounds that they become overly fond of money, but Cephalus, who has been only moderately active in moneymaking (μέσος τις γέγονα χρηματιστής), is praised for his relative detachment from money (*Rep.* 330b-c).

Some philosophers were praised, at least to a degree, for using their intelligence to make money. Thales' clever cornering of the market on olive-presses is a prominent example (*Arist. Pol.* 1259a6ff.). A larger problem would be where Socrates got the money to invest in the first place, given his avowed poverty in Plato's presentation of him. A passage in Plutarch's *Life of Aristides* suggests that he received the money to invest from Crito (*Plut. Arist.* 1.9).³² I would grant that, *prima facie*, asserting that Socrates in part supported himself by interest income might constitute a criticism in the context of fourth-century values, but it is not clear to me that the only explanation of Aristoxenus' report is malice. Ancient as well as modern scholars may have tried to puzzle out how Socrates supported himself. Perhaps Aristoxenus' reference to Socrates as a stone-cutter, which is discussed above (fr. 51 Wehrli), arose in the same context and Aristoxenus addressed the issue by saying that "Socrates supported himself by working at his father's trade of stone-cutting and *also* (on this reading the καί would be due to Aristoxenus) made some money by investing a sum given to him by his friend Crito." We know too little of the context of the remark in Aristoxenus to be sure whether Socrates' investment was presented as a clever application of philosophical intelligence or as a reprehensible exercise in usury. Nothing in what Aristoxenus says suggests that Socrates became wealthy from the practice. The implication is that Socrates used the income of his investment for subsistence and did not invest again until he had used up all of his earnings ("by investing he collected the money that accrued, and then, when he had spent this, he invested again").³³ The point may have been to show

³² See Sansone (1989) 179, who is skeptical about the story.

³³ There is not enough of a context to arrive at a certain interpretation of Socrates' moneymaking procedure. It is described by the bare participle τιθέντα. τίθημι is used of "depositing" in various financial senses (LSJ s.v. II.7). It is thus plausibly interpreted in fr. 59 as "depositing" (money as an investment), but the exact nature of the transaction is not spelled out. Plutarch (*Arist.* 1.9) interpreted τιθέντα along these lines, since he describes Socrates as having seventy minas that are explicitly said to

how successful Socrates was in obtaining the means for his basic support with a minimum of time and effort spent, thus leaving the bulk of his time for philosophy.

A number of scholars have seen malice in another report of Aristoxenus according to which Socrates was the παιδικά, “beloved boy,” of Archelaus:

... διήκουσεν (sc. Σωκράτης) Ἀρχελάου τοῦ φυσικοῦ, οὗ καὶ παιδικὰ γενέσθαι φησὶν Ἀριστόξενος. (fr. 52a [Wehrli] = D.L. 2.19)

He became a pupil of Archelaus, the writer on nature, of whom Aristoxenus says he also became the beloved.

Σωκράτης: ... Ἀριστόξενος δὲ Ἀρχελάου πρῶτον αὐτὸν διακοῦσαι λέγει. γεγονέναι δὲ αὐτοῦ καὶ παιδικὰ, σφοδρότατόν τε περὶ τὰ ἀφροδίσια, ἀλλὰ ἀδικήματος χωρὶς, ὡς Πορφύριος ἐν τῇ φιλοσόφῳ ἱστορίᾳ φησὶν. (fr. 52b [Wehrli] = Suda, s.v. Σωκράτης)

Socrates: ... Aristoxenus says that he was first the pupil of Archelaus and that he also became his beloved and had a very strong sex drive, but this did not lead him to act unjustly, as Porphyry says in his *History of Philosophy*.

Woodbury is the most vehement on this point: “The homosexual implication causes no astonishment either, given Aristoxenus’ other essays in denigration.”³⁴ Guthrie similarly treats this as an accusation of Aristoxenus,³⁵ and Taylor calls it “scandal mongering.”³⁶ This seems to be a clear misapplication of these scholars’ personal mores to ancient society.³⁷ There is no reason to believe that Aristoxenus intended to

be let out at interest (τοκισόμενας). A. von Mess (1916) 96–7, argues that τιθέντα cannot have such a specific sense and appears to interpret the fragment as saying that Socrates “put out his hand” (i.e. for a donation) to his friends. This is more problematic than understanding τιθέντα as “investing,” since no friends are mentioned. For further interpretation of this passage see Schorn’s essay in this volume.

³⁴ Woodbury (1971) 303.

³⁵ Guthrie (1969) 390 n. 1.

³⁶ Taylor (1953) 67.

³⁷ These scholars are clearly uncomfortable with the idea of pederasty as such, which was not true of the Greeks. Patzer (2006) develops the argument in a more

denigrate Socrates in any way by saying that he was the παιδικά of Archelaus. This is not the place for a long examination of Athenian attitudes towards pederasty. The *Symposium* is evidence enough that, in many contexts, such relationships were considered healthy. That the assertion need not have any whiff of scandal mongering can be shown by a passage in Plato. At the beginning of his dialogue *Parmenides*, Plato describes Zeno as tall and good-looking and reports the story that he had been the παιδικά of Parmenides (127b). The implication is that, given his good looks, it was not surprising that he was the beloved boy of Parmenides. There is not the slightest hint in this passage that Plato is disparaging Zeno. Aristoxenus' assertion about Socrates need be no different. Indeed, given the tradition that Socrates was decidedly not good looking we might rather see it as criticism of Archelaus' taste in male beauty or alternatively praise of his ability to see Socrates' inner beauty. Thus there is no malice in Aristoxenus' report that Socrates was the beloved boy of Archelaus just as there need be none in the report that he worked as a stone cutter or made a small amount of money from investing.

There are two remaining passages that have been used as irrefutable evidence of Aristoxenus' malice towards Socrates, on the grounds that they accuse Socrates of having an uncontrollable temper and of being a sex maniac who was driven to bigamy by his lust. The problem with these charges is not that there is no basis at all for them but rather that they are gross exaggerations and caricatures of what Aristoxenus actually says. What does Aristoxenus say about Socrates' temper? Cyril of Alexandria and Theodoret both quote from a section of Porphyry's *History of Philosophy* concerning Socrates' temper and both clearly say that Porphyry was using Aristoxenus as his source at this point (fr. 54a and 54b Wehrli). Here is Cyril's version:

φέρε γὰρ ἴδωμεν καὶ πρὸ γε τῶν ἄλλων ὅποιος ἦν ὁ
 διαβόητος παρ' αὐτοῖς Σωκράτης, κτλ. ... οὐ μὴν ἔτι καὶ
 τοῖς Πορφυρίου γράμμασιν ἀντερεῖ ὃς τὸν ἐκάστου τῶν
 ἀρχαιοτέρων ἀπεσημῆναι βίον, κτλ. ... ἔφη τοίνυν ὥδι περι

sophisticated way by arguing that Aristoxenus purposely added that Socrates was seventeen, when he first associated with Archelaus so that he would be approaching the age at which the Greeks no longer approved of such relationships. For a response to Patzer, see Schorn's essay in this volume.

αὐτοῦ: “λέγει δὲ ὁ Ἀριστόξενος, ἀφηγούμενος τὸν βίον τοῦ Σωκράτους, ἀκηκοέναι Σπινθάρου τὰ περὶ αὐτοῦ, ὃς ἦν εἰς τῶν τούτῳ ἐντυχόντων. τοῦτον λέγειν, ὅτι οὐ πολλοῖς αὐτός γε παθανωτέροις ἐντετυχηκῶς εἴη, τοιαύτην εἶναι τήν τε φωνήν καὶ τὸ στόμα καὶ τὸ ἐπιφαινόμενον ἦθος, καὶ πρὸς πᾶσι δὲ τοῖς εἰρημένοις τὴν τοῦ εἶδους ιδιότητα. γίνεσθαι δέ που τοῦτο, ὅτε μὴ ὀργίζοιτο, ὅτε δὲ φλεχθεῖη ὑπὸ τοῦ πάθους τούτου, δεινὴν εἶναι τὴν ἀσχημοσύνην. οὐδενὸς γὰρ οὔτε ὀνόματος ἀποσχέσθαι οὔτε πρᾶγματος.” ...

For, come, let us see, even before the others, what sort of man Socrates was, who was famous among them ... Surely [someone who disbelieves the stories about Socrates] will not still speak against even the writings of Porphyry who delineated the life of each of the ancients ... He spoke, then, as follows about him: “Aristoxenus says, while recounting the life of Socrates, that he heard things about him from Spintharus, who was one of those who had met Socrates. This man said that he at least had not encountered many men who were more persuasive, such as both his voice and his speech and the character manifest in them, and in addition to all the things mentioned, his singular appearance. This occurred, when he was not angry, but when he was inflamed by this emotion, his lack of decorum and disfigurement was terrible, for he did not refrain from any word or action.” ... (fr. 54a [Wehrli] = Cyril of Alexandria, *Against Julian* 6.185. See also fr. 54b Wehrli which is similar.)

Aristoxenus himself cites his father Spintharus, “who was one of those who had met Socrates,” as the origin of his report. Spintharus asserts in Cyril’s version that “he had not encountered many men who were more persuasive.” Theodoret’s version is even stronger saying that “he had encountered no one who was more persuasive than Socrates.”³⁸ This would seem to be very high praise, indeed. His position as the most persuasive man in the world is explained partly in terms of his physical characteristics, that is, his voice and his unique and striking appearance (to which Plato alludes on many occasions), but also as resulting from the character displayed in (ἐπιφαινόμενον) his skill

³⁸ Xenophon (*Mem.* 4.6.15) similarly says that “when he spoke he got his listeners to agree with him more than anyone I know” (πολὺν μάλιστα ὧν ἐγὼ οἶδα, ὅτε λέγοι, τοὺς ἀκούοντας ὁμολογοῦντας παρείχε). On this passage in Xenophon see Morrison (1988) 14–5.

in speaking and arguing. Spintharus adds, however, that Socrates was like this when he was not angry, but that "when he was inflamed by this emotion, his lack of decorum and disfigurement was terrible, for he did not refrain from any word or action." Socrates was transformed both in character and appearance.

How should this description of Socrates' anger be understood? It will depend very much on the cultural context from which it is viewed. The Christian sources who cite this fragment of Aristoxenus, Cyril of Alexandria and Theodoret of Cyrrhus, both writing in the fifth century CE, clearly see Socrates' anger as reprehensible behavior. Cyril comments immediately after quoting the fragment from Aristoxenus that "there is nothing more shameful than anger" and that it is "the worst illness of the mind." He goes on to support these assertions by quoting passages from both the Old and New Testaments including "how blessed are those of gentle spirit" (*Matthew* 5.5). On the other hand, recent scholarship has shown that, in fifth- and fourth-century Athens, anger was valorized "as a principle for public action"; acting in the heat of anger was praised as appropriate action for a man, while hiding one's anger or delay in acting on it was not acceptable.³⁹ Some Athenians reading Aristoxenus' description of Socrates' anger, thus, may not have felt that it was, *prima facie*, inappropriate. In philosophical circles, however, and particularly in Plato such a valorization of anger was rejected in favor of its control by reason.⁴⁰ Most importantly, Aristoxenus himself in another fragment (fr. 30 Wehrli) illustrates the Pythagorean ideal of never punishing in anger with the story of Archytas, who refused to punish his slaves, when they had done wrong, because he had become angry with them.⁴¹ This Pythagorean ideal is completely contrary to the Athenian idea that it was appropriate to punish in the heat of anger. It is usually assumed that Aristoxenus admired Archytas' control and even contrasted it with Socrates' lack of control to the greater glory of the Pythagoreans.⁴² Close reading of the passage shows, however, that Archytas too, despite his control, is presented as prone to anger, and his behavior may be as much a parallel

³⁹ Allen (2003) 86. See further Allen (2000).

⁴⁰ E.g., *Rep.* 572a. See Allen (2003) 95–7.

⁴¹ See Huffman (2005) 283–92.

⁴² Wehrli (1967) 64.

to Socrates' as a contrast.⁴³ Although nothing in the context of either of these fragments makes Aristoxenus' attitude to anger completely clear, it seems likely that Aristoxenus and indeed most philosophers among his readers will have seen Socrates' anger in an unfavorable light. In this context to say that someone could, on occasion, lose his temper and both say and do things he should not is not a compliment, to be sure. At the same time it is important to view the remark in perspective. Nothing in the report of Spintharus indicates that Socrates was prone to these rages; it rather suggests that they were the exception. If he were prone to rages, the first part of Spintharus' report about Socrates' persuasiveness being based on the character manifest in his speech would not make much sense. The implication seems rather to be that Socrates was the most persuasive of men, in part because he usually did not lose his temper, and that, given his normal behavior, these outbursts were all the more striking. Thus, to report that Aristoxenus presented Socrates as choleric, as some scholars do,⁴⁴ is in conflict with what Aristoxenus actually says. Indeed, scholars seem to be influenced more by the Christian Theodoret's summary of what Aristoxenus says than Aristoxenus' own words. Theodoret says that Porphyry's (i.e., Aristoxenus') account presents Socrates as "choleric" (ἀκρόχολον, 12.61) and "ill tempered" (δυσόγητος, 12.69) but neither of those words is actually used by Aristoxenus. They represent Theodoret's interpretation of the passage.

There are several ways of reading a report like this, in which positive and negative characterizations are combined. Plutarch and most modern scholars assume that Aristoxenus' and evidently Spintharus' goal was to vilify Socrates and that the words of praise in the first part of the report are just the set-up to get us to believe the slander provided in the second part. If we recognize, however, that we cannot start from the unargued assumption that Aristoxenus was hostile to Socrates and look at the passage in itself, it is clear that it is just as plausible to read it as a largely favorable account. Aristoxenus is pointing out to us that this most remarkable of men could on occasion give way to a raging temper. This need be nothing more than the remark of a perceptive student of human nature. Archytas would then be a parallel case of a

⁴³ Huffman (2005) 290.

⁴⁴ Patzer (1987) 4.

philosopher who could be overcome with anger but who perhaps dealt with it better than Socrates by refusing to act when angry, even when the anger was justified. Of course, if we expect that our heroes are perfect and never yield to any flaws, then we can see Aristoxenus' account as an attack on Socrates, but surely most of us are more familiar with human nature than to expect such perfection. Is there evidence for such a temper in Plato's or Xenophon's Socrates? There is no time to examine all the evidence here, and, as I have stressed above, I am not claiming to prove that Aristoxenus is right in all of his assertions about Socrates, just that he need not be malicious. Still, one brief point is not out of place. According to Guthrie, "That Socrates had a passionate nature there is no doubt, and those who were smarting under the lash of his anger may well have felt about it as Spintharus did."⁴⁵ Guthrie then points to a passage in Xenophon's *Memorabilia* (1.2.30) where Socrates, frustrated at Critias' abject pursuit of the love of Euthydemus, retorted in the presence of many bystanders that "Critias seems to have the feelings of a pig, since he wants to rub himself against Euthydemus just like pigs rub themselves against stones." Spintharus need only have been thinking about instances like this, where Socrates lashed out in a fairly crude way.

Finally we come to Socrates the sex maniac. Both Cyril and Theodoret go on, shortly after the passages on Socrates' temper given above, to quote again from Porphyry. I present the two texts in parallel columns below. Both revealingly include and exclude things that the other does not. In the overlapping parts, however, Theodoret is likely to be closer to what Porphyry presented as Aristoxenus, as I argue in the appendix:

⁴⁵ Guthrie (1969) 390.

(fr. 54a [Wehrli] = Cyril of Alexandria, *Against Julian* 6.186)

γέγραφε γὰρ ὥδι πάλιν περὶ αὐτοῦ Πορφύριος: “ἐν δὲ τοῖς περὶ τὸν βίον τὰ μὲν ἄλλα εὐκόλον, καὶ μικρὰς δεόμενον παρασκευῆς εἰς τὰ καθ’ ἡμέραν γεγενῆσθαι. πρὸς δὲ τὴν τῶν ἀφροδισίων χρῆσιν σφοδρότερον μὲν εἶναι, ἀδικίαν δὲ μὴ προσεῖναι. ἢ γὰρ ταῖς γαμεταῖς ἢ ταῖς κοιναῖς χρῆσθαι μόναις. δύο δὲ σχεῖν γυναῖκας ἅμα, Ξανθίππην μὲν πολίτιν καὶ κοινοτέραν πως, Μυρτῶ δὲ Ἀριστείδου θυγατρίδην τοῦ Λυσιμάχου, καὶ τὴν μὲν Ξανθίππην περιπλακείσαν λαθεῖν, ἐξ ἧς ἑαυτῷ Λαμπροκλῆς ἐγένετο. τὴν δὲ Μυρτῶ γάμφω, ἐξ ἧς Σωφρονίσκος καὶ Μενέξενος.”

14 λαθεῖν *codd.* λαβεῖν] Wehrli *cf. fr. 54b*

For Porphyry has again written as follows about him: “In matters having to do with the manner of his life, he was in other respects easily satisfied and required few material goods in his daily life. He had a very strong sex drive, but there was no injustice attached to it. For he only had sex either with a woman who was married to him or with a woman who was [legitimately] available [for such purposes]. He came to have two

(fr. 54b [Wehrli] = Theodoret, *A Cure of Greek Maladies* 12.61–5)

καὶ ὁ Πορφύριος δὲ τὴν φιλόσοφον ἱστορίαν συγγράψας ... καὶ ἄλλα δὲ τοιαῦτα διεξελθὼν δείκνυσιν αὐτὸν καὶ ταῖς ἡδυπαθείαις δεδουλωμένον. λέγει δὲ οὕτως: “πρὸς δὲ τὴν τῶν ἀφροδισίων χρῆσιν σφοδρότερον μὲν εἶναι, ἀδικίαν δὲ μὴ προσεῖναι. ἢ γὰρ ταῖς γαμεταῖς ἢ ταῖς κοιναῖς χρῆσθαι μόναις. δύο δὲ σχεῖν γυναῖκας ἅμα, Ξανθίππην μὲν πολίτιν καὶ κοινοτέραν πως, Μυρτῶ δὲ Ἀριστείδου θυγατρίδην τοῦ Λυσιμάχου. καὶ τὴν μὲν Ξανθίππην προσπλακείσαν λαβεῖν, ἐξ ἧς ὁ Λαμπροκλῆς ἐγένετο, τὴν δὲ Μυρτῶ γαμηθείσαν, ἐξ ἧς Σωφρονίσκος καὶ Μενέξενος. αὐταὶ δὲ ξυνάπτουσαι μάχην πρὸς ἀλλήλας, ἐπειδὰν παύσαιντο, ἐπὶ τὸν Σωκράτην ὥρμων, διὰ τὸ μηδέποτε αὐτὰς μαχομένας διακωλύειν, γελᾶν δὲ καὶ ἀλλήλαις καὶ αὐτῷ μαχομένας ὁρῶντα.”

And Porphyry, having composed his history of philosophy... and having narrated other such things shows that he was also enslaved to the life of pleasure. He says the following: “He had a very strong sex drive, but there was no injustice attached to it. For he only had sex either with a woman who was married to him or with a woman who was [legitimately] available [for such purposes]. He came to have two women at the same time,

women at the same time, Xanthippe, who was a citizen and in some way of the more available sort, and Myrto, the granddaughter of Aristides the son of Lysimachus. Xanthippe had sexual relations with him in secret, and from her Lamprocles was born to him, but Myrto [had sexual relations with him] in marriage, and from her Sophroniscus and Menexenus [were born].”

Xanthippe, who was a citizen and in some way of the more available sort, and Myrto, the granddaughter of Aristides, the son of Lysimachus. He took up Xanthippe after she became attached to him, and from her Lamprocles was born, and Myrto after she was married to him, and from her Sophroniscus and Menexenus [were born]. These women joined battle with one another. Whenever they stopped, they attacked Socrates, because he never prevented them from fighting but laughed when he saw them fighting with one another and with him. ...”

There are a number of things to comment on here. First, both Cyril and Theodoret quote the passage for essentially the same purpose: to show that figures like Socrates who are glorified by pagans such as Julian do not maintain a high moral standard in their actions, whatever moral ideals they may express. Both Cyril and Theodoret stress that prominent figures in the Christian tradition, in fact, lived better lives.⁴⁶ Thus, both authors are likely to be skewing whatever they found in Porphyry about Socrates in order to emphasize this point. In this case we are able to see particularly clearly how selective quotation can distort the purposes of the author quoted, in this case Porphyry/Aristoxenus. Theodoret prefaces his quotation from Porphyry with his own judgment that Porphyry showed that Socrates was “enslaved to the life of pleasure.” He then begins by quoting the assertion that “he had a very strong sex drive.” Cyril, however, makes no reference to

⁴⁶ Cyril, *Contra Julianum* 6.185 “For he thinks that those that he admires are better than those in our tradition [i.e., notable Christians], but he fails to attain the truth and misses the mark. For come let us see most especially what sort of man Socrates was, who was famous among them.” Theodoret, *Graec. affect. curatio* Praef. 15: “... since I see Greek culture strutting proudly because of its philosophers who were born long ago ... I will show in my twelfth book that their life was unworthy not only of philosophers but even of commended slaves but that the life of the apostles and those who followed them was higher than human nature”

Socrates being enslaved to pleasure and starts his quotation one sentence earlier. This sentence reveals that, as in the case of the report of Socrates' temper, so here, Aristoxenus' mention of his strong sex drive is situated in a primarily positive picture of Socrates. Despite Theodoret's assertion that Socrates was shown to be "enslaved to a life of pleasure," the sentence quoted by Cyril shows that Aristoxenus, in fact, described Socrates as "in other respects easily satisfied" and as requiring "few material goods in his daily life." Aristoxenus contrasted the simplicity of the rest of his life with his sex life, where he was not so easily satisfied. Even here, however, there is an attempt to mitigate any negative implications of Socrates' strong sex drive, by asserting that there was no injustice involved. Plutarch, as we have seen, takes this as a rhetorical strategy on Aristoxenus' part in order to get the reader to accept his supposedly malicious report, but there is no necessity to agree with Plutarch on this point. Why did Cyril not, like Theodoret, gloss over Aristoxenus' reference to how simple Socrates' desires were in most areas and focus just on his strong sex drive? It appears that he recognized the rhetorical structure of the passage in Porphyry/ Aristoxenus, and felt it awkward to quote just half of the contrast concerning Socrates' character. That rhetorical sensitivity on Cyril's part allows us to get past Theodoret's single-minded attempt to see the negative features of Socrates' actions and see that Aristoxenus was, in fact, presenting Socrates in a more rounded way.

Cyril's quotation of the extra sentence also allows us to see that, in fr. 55 Wehrli (see above), Plutarch distorts what Aristoxenus says. Plutarch agrees closely with Aristoxenus' language as quoted in Cyril and Theodoret, when it comes to the assertion that "there was no injustice attached" to Socrates' actions (ἀδικίαν δὲ μὴ προσεῖναι, Cyril/Theodoret; ἀδικία δ' οὐ προσήν, Plutarch). When he presents Aristoxenus' "negative" remarks on Socrates' behavior, however, Plutarch asserts that Aristoxenus called Socrates "without self-control," ἀκόλαστον, but we can see from the quotation in Cyril that Aristoxenus said nothing of the sort. Aristoxenus does not use the word ἀκόλαστος in this passage and, in fact, describes Socrates in just the opposite way, as εὐκόλον, "easily satisfied," in most respects and as requiring few material goods (fr. 54a Wehrli). Plutarch seizes on Aristoxenus' assertion that Socrates had a very strong sex drive and turns this into the quite different assertion that he had no self-control, an

assertion that is in flat contradiction with what Aristoxenus actually says.⁴⁷ In Aristoxenus, Socrates has a very strong sex drive but controlled it to such a degree that it never caused him to act unjustly.

It is much more plausible to take Aristoxenus' account of Socrates' strong sex drive as a balanced appreciation of a complicated character than as an attempt to brand him as without self control. In accordance with a number of passages in Plato, Socrates is presented as, for the most part, easy to satisfy and as requiring few material possessions; his sexual passion was the exception. Aristoxenus hastens to say that Socrates was not so carried away by his sex drive as to force himself on anyone or to seduce respectable women. He did not have affairs. Aristoxenus says that "he only had sex either with a woman who was married to him or with a woman who was [legitimately] available [for such purposes]." Presumably most of us would not begrudge Socrates sex within marriage. What of the other "available" women to whom Aristoxenus refers? This must be a reference to women who were concubines, mistresses or prostitutes, women who were legitimately available to men for sexual relations in ancient Athens but whom men did not marry. Aristoxenus goes on to identify Xanthippe as "in some way of the more available sort." I take this to mean that Aristoxenus knew that she was somewhere in the continuum constituted by mistresses, concubines and prostitutes but was not sure how to define her status precisely. To modern ears to say of someone that he had a strong sex drive but that there was no injustice involved on the grounds that he used prostitutes, does sound very much like an indirect way of attacking that person. We simply do not approve of prostitution. There is considerable evidence, however, that Athenian society was much different in this regard. In the speech *Against Neaira* attributed to Demosthenes, the speaker appears to state typical Athenian values when he asserts

⁴⁷ σφοδρότερον like σφόδρος itself could indicate that Socrates' sex drive was "excessive" and hence indicate criticism on Aristoxenus' part. The emphasis on excess does not work very well in context, however, because Aristoxenus would on this interpretation first seem to criticize Socrates' sex drive as excessive and then turn around and make us wonder what was excessive about it if no injustice was involved. The word is better taken to mean strong here with the comparative intensifying it to "very strong." There are parallels for such a reading. Thus Plato at *Plt.* 308a describes a desire as σφοδροτέρων but in itself the word does not seem to indicate excess since Plato adds τοῦ δέοντος. At Arist. *Top.* 103a22, σφοδροτέρα ὁμοιότης is just "a stronger similarity" with no excess implied.

“We have mistresses for the sake of pleasure, concubines for the daily care of our bodies, and wives for the production of legitimate children” (Dem. 59.122). Would an Athenian society that could hear these words with equanimity regard Aristoxenus’ description of Socrates’ freedom from injustice in sexual matters, on the grounds that he visited “available women,” as sarcasm or indirect slander? It seems much more likely that they would regard it as a simple statement of fact.

It is crucial to note, moreover, that Aristoxenus does not say that Socrates had multiple mistresses, or that he visited prostitutes, any more than he says that Socrates had multiple wives. Scholars have again been misled by the tendentious summaries of Aristoxenus by the two Christian authors. Cyril describes Socrates as woman crazy (γυναικομανής, 6.186). Theodoret says he was enslaved to pleasure (12.63) and that he was not even satisfied with two women but freely used prostitutes (12.69). Aristoxenus’ evidence, on the other hand, clearly suggests that there were just two women in Socrates’ life.⁴⁸ His use of the plurals in describing Socrates’ sexual partners has been much misunderstood. When Aristoxenus asserts that ταῖς γαμεταῖς ἢ ταῖς κοιναῖς χρῆσθαι μόναις, the plurals γαμεταῖς and κοιναῖς must refer to classes of women. This becomes clear in what follows. Aristoxenus asserts that Socrates came to have two women, carefully using the term γυναῖκας, which can include both sorts of women. He then uses language to describe these two women that exactly corresponds to the language he has used to describe the two classes of women. Myrto is described explicitly as “married” (γαμηθεῖσαν) to Socrates and hence as belonging to the first class (γαμεταῖς), whereas no language of marriage is used with regard to Xanthippe, and she is described as “somehow of the more available sort” (κοινοτέραν πῶς), which clearly puts her in the second class (ταῖς κοιναῖς). Aristoxenus clearly only assigns one wife to Socrates so that the plural γαμεταῖς cannot have been intended to indicate multiple wives and hence the plural κοιναῖς does not indicate that he had multiple partners of the “available sort” either. Accordingly, I have translated in a way that leaves open the number of partners that Socrates had in each class: “For he only had sex either with a woman who was married

⁴⁸ On this point I disagree with Schorn in his essay in this volume, where he accepts that Aristoxenus’ report does suggest that Socrates visited prostitutes.

to him or with a woman who was [legitimately] available [for such purposes]."⁴⁹

What about Socrates' two women, Myrto and Xanthippe? Close examination of the text of Aristoxenus makes clear that he thought of Xanthippe as Socrates' mistress and Myrto as his wife, but other reports in the ancient tradition clearly misunderstood the situation and thought that Socrates had two wives (Athenaeus 555d = fr. 57 Wehrli). Most modern scholars and some of the ancients appear to connect this assertion with the attribution of a strong sex drive to Socrates, so that the passage is read as saying that Socrates had such a strong sex drive that he practiced bigamy. Nothing in the actual words of Aristoxenus, however, accuses Socrates of bigamy or connects his sex drive with his having two women. In Aristoxenus the comment about his two women is not introduced as an illustration of the lengths to which Socrates' sex drive led him. Aristoxenus says that, although he had a strong sex drive, he did not give in to any injustice, because his sexual activity was with acceptable partners. The remark about Socrates' two women is introduced not to show how debauched Socrates was but to show that both of Socrates' partners were legitimate objects of affection. In the excerpts from Porphyry quoted by Cyril and Theodoret, Aristoxenus simply asserts that Socrates came to have two women at the same time, defines the nature of Socrates' relation to each of them and identifies the children Socrates had by them. He does not express indignation over Socrates' behavior but presents it in a matter of fact way. As the quotation from the speech *Against Neaira* given above shows, Athenian mores saw no injustice in a man's having both a wife and a mistress.

⁴⁹ ταῖς κοιναῖς is often translated "prostitutes" (LSJ κοινός, IV.3c), but this is misleading in English. While mistresses and concubines can be described as prostitutes, the words "mistress" and "concubine" are used precisely to distinguish such women from more common prostitutes. I would suggest that in Greek the word κοινή is used by Aristoxenus of the entire range of mistresses, concubines, prostitutes, etc., in order to indicate that such women are not under the protection of a specific man but are rather "common" to all men. That this is what he is doing is indicated by his division of women into two classes, the married (implicitly including the marriageable) and those available outside marriage. It seems to me that the translation "available" best brings out this force of κοινή. In terms of Athenian mores, such women are not under the protection of a man and hence are legitimately available to all men for the purposes of forming extra-marital relationships.

Elsewhere in the tradition concerning Socrates' two women it is explained that, because of a shortage of men during the Peloponnesian War, a law was passed which allowed an Athenian male to have legitimate children by his mistress.⁵⁰ Since the primary function of marriage was to provide legitimate children, this provision may have been misunderstood in the later tradition as allowing for two wives and hence may have led to the idea that Socrates was a bigamist. According to Athenaeus, Hieronymus of Rhodes cited the decree (fr. 53B White).⁵¹ There has been considerable controversy about the authenticity of this decree, but two of the standard treatments of Athenian law, that of Harrison and that of MacDowell,⁵² both are inclined to accept its authenticity. There is no evidence that Aristoxenus mentioned the decree, but, even if he did, it was not to justify Socrates' having a mistress and a wife. There was no need to justify that; it was to explain the status of Socrates' children. In Socrates' case Myrto was his legitimate wife and Xanthippe his mistress, whose child became legitimate because of the decree. Aristoxenus explicitly says that Myrto became married to Socrates (τὴν δὲ Μυρτὴν γαμηθεῖσαν, fr. 54b Wehrli) whereas, Xanthippe, although a citizen, was, as we have seen, identified as an "available woman," and bore Socrates a child not as a wife but "after she became attached to him" (προσπλακείσαν, fr. 54b Wehrli), which suggests a less formal relationship.

Scholars have wanted προσπλέκω to refer explicitly to sexual relations.⁵³ In classical Greek there is no evidence, however, that προσπλέκω refers to sexual intercourse, and there is no reason to assume that this was what Aristoxenus was trying to indicate. The meanings given by LSJ for the passive are "cling to" and "be attached to."⁵⁴ These meanings make perfect sense in the context in Aristoxenus. The point is that while Myrto became one of the women in Socrates' life by formal marriage, Xanthippe did so simply because she "became

⁵⁰ Harrison (1968) 16–7; MacDowell (1978) 89–90; Walters (1983) 323–4.

⁵¹ See White (2004) 206–9.

⁵² Harrison (1968) 17; MacDowell (1978) 90.

⁵³ Fitton emended the text, evidently because he thought that we needed a word referring explicitly to sexual intercourse (1970) 61. Woodbury (1973) 22 responds by citing Lampe's *Patristic Greek Lexicon* for such a usage of προσπλέκω.

⁵⁴ See Diodorus Siculus 25.19.1 describing Hamilcar's sons as clinging to their father and Plu., *Whether an Old Man Should Engage in Public Affairs*, 796b, describing young men who attach themselves to an elder statesman.

attached to him.” This attachment certainly included a sexual relationship as is clear from the fact that Xanthippe had Socrates’ child, but Aristoxenus is not referring explicitly to that sexual relationship here. He is defining the different status of the two women in Socrates’ life; one married him formally and the other came to live with him on the basis of a more informal attachment.⁵⁵

Although later authors such as Plutarch, Cyril and Theodoret clearly chose to take the story in a derogatory way, most of our early sources do not.⁵⁶ Aristotle, Callisthenes, Demetrius of Phaleron, Satyrus and Hieronymus are all cited along with Aristoxenus as sources for versions of the story which appear to present Socrates’ having two women in a matter of fact or even positive manner (Hier. fr. 53B White; Aristox. fr. 58 Wehrli = Plut., *Arist.* 27; see D.L. 2.26). It is very difficult to untangle the sources in order to distinguish the contributions of these various authors. One very favorable explanation of Socrates’ marriage to Myrto was in circulation. Plutarch reports that “he took up Myrto because she remained a widow on account of her poverty and was in want of the necessities of life” (fr. 58 Wehrli). Aristoxenus is one of four authorities that Plutarch mentions in this passage, and thus we cannot be sure that this report was found in Aristoxenus’ *Life of Socrates*. It would, however, be perfectly in accord with the rest of what Aristoxenus says about his two women. Once again we need only interpret Aristoxenus’ account of Socrates sex drive as slander, if we start from the assumption that Aristoxenus was a malicious gossip. If we look at the passage on its own merits, there is a much more plausible reading according to which Aristoxenus is providing a balanced presentation of Socrates which included many positive features and seems more interested in what is striking than what is scandalous.

⁵⁵ Ogden (1996) 190 also adopts this translation. Fitton’s emendation (1970) πρὸς παλλακείαν (he took Xanthippe “for concubinage”) is thus unnecessary and improbable in itself. There are only five instances of this noun in all of Greek and four are late. The fifth is an emendation in a speech of Isaeus (3.39). The only parallel for the whole phrase πρὸς παλλακείαν is the anonymous *Periplus of the Red Sea* (49), which dates to the first century C.E.

⁵⁶ Earlier, Panaetius evidently also took the story in a derogatory way, in that he is reported to have “sufficiently controverted” (Plut., *Arist.* 27.3) those who talked about the women of Socrates (see also Athen., *Sophists at Dinner* 13.2 555d–556b).

In the case of Socrates' sex drive, as in the case of Socrates' anger, there is corroborating evidence of a sort in Plato. Plato presents Socrates as a man with at least an apparently strong sex drive. It is impossible to discuss the evidence in detail here, but I would note briefly that in the *Meno*, Socrates refers to his weakness for anyone who is good-looking (76c, εἰμὶ ἥττων τῶν καλῶν) and, in *Charmides*, describes how inflamed he became when he caught a glimpse inside Charmides' cloak (155d). It is true that in the *Symposium* we are told that this is just an appearance and through Alcibiades' story we are shown the inner Socrates, whose self-control is superhuman and who denigrates physical beauty (219c-d). It seems to me quite probable that this latter Socrates is an artistic creation of Plato. What Spintharus and Aristoxenus give us may be closer to the historical Socrates.⁵⁷ Even if it is not, Spintharus may have been misled by the apparent amorous nature of Socrates, to which Plato attests, into thinking that Socrates was of a passionate sexual nature. He may never have been disabused of this notion as Alcibiades was. Spintharus thus tells Aristoxenus of Socrates' reputation for sexual passion but has to confirm that he knows of no case in which Socrates was ever led to unjust action because of it. I again do not see any reason to assume that there is malice involved in Aristoxenus' account of Socrates' sex life.

One further point about Aristoxenus' presentation of Socrates is revealed by the different ways in which Cyril and Theodoret quote the passage. Just as Cyril quoted an extra sentence at the beginning, so Theodoret adds an extra sentence about Socrates' family life at the end, which suggests once again that Aristoxenus' goal was not to show Socrates as a sex maniac. Cyril stops the quotation with the assertion that Socrates had two women at the same time and the description of the children that resulted from these liaisons, which might lead us to think that it was the intensity of Socrates' passion in which Aristoxenus was interested. Theodoret's quotation of the next sentence shows again, however, that Aristoxenus was not maliciously out to emphasize Socrates' strong sex drive. Instead he presents the striking image of Myrto and Xanthippe quarreling with one another, stopping only

⁵⁷ There is other evidence for Socrates' strong sex drive. In *De fato* 10, Cicero, without naming his source, reports that the physiognomist Zopyrus had declared Socrates mulierosum ("addicted to women"), although this was a natural flaw that he overcame by discipline (see also Cic. *Tusc.* 4.80).

to quarrel with Socrates, who was laughing all the while. Cyril, who emphasizes how crazy for women Socrates was (γυναικομανής) just before quoting the passage, leaves out this picture of a more easy-going and detached Socrates. Why does Theodoret include it? Perhaps, he thought that the portrait of Socrates suffering the attacks of his two women and doing nothing to stop them illustrated the scandalous situation to which his supposed slavery to passion (ταῖς ἡδυπαθείαις δεδουλωμένον) had brought him. Aristoxenus, who portrayed Socrates not as a slave to passion but as easy to please in most aspects of his life and as controlling his strong sex drive so as to commit no injustice, appears simply to be struck by the novelty of the situation.

4. Conclusion

Aristoxenus' presentation of Socrates is enough at odds with the idealization of Socrates by Plato to guarantee that later authors, who were attached to that ideal, would see Aristoxenus' deviations from it as slander. If Aristoxenus does not present Socrates as having the superhuman self-control displayed in Plato, then Aristoxenus must have intended to say that he lacked all self-control, in the eyes of such critics. There is a much more plausible way of explaining what Aristoxenus says about Socrates. Aristoxenus is arguably the first person in the Greek tradition to write *bioi* of individual philosophers. We do not know what it meant to write such a *bios*, since none of them have survived intact, but why not suppose, what the evidence suggests, that Aristoxenus was driven to write such works because he was interested in the complexity of human character.⁵⁸ His descriptions of Socrates suggest that he was intrigued by the extent to which brilliant and remarkable individuals were still susceptible to minor flaws. Momigliano objected to von Mess' earlier attempt⁵⁹ to rehabilitate Aristoxenus on the grounds that "ancient philosophers were not supposed to get angry or to lend money."⁶⁰ This is undoubtedly why

⁵⁸ For a good presentation of a similar view of Aristoxenus as a biographer, see Fortenbaugh (2007). For a more detailed account of Aristoxenus' methodology as a biographer see Schorn's essay in this volume.

⁵⁹ von Mess (1916).

⁶⁰ Momigliano (1993) 75.

Plutarch reacted so violently to Aristoxenus, at least in one passage. But, if we accept Momigliano's point, we are driven to the conclusion that a *bios* had to be either a panegyric or a malicious attack. Why should we accept so rigid a dichotomy? Aristoxenus provides us with a description of a remarkable and complex man. Why should we not assume that such was his intention rather than adopt the much more problematic assumption that he was motivated by malice?

5. Appendix: The Text of the Second Half of Fr. 54a and 54b

Theodoret's and Cyril's texts of this passage (see the parallel columns given in the text above) are clearly based on the same original text in Aristoxenus/Porphyry but differ in three places in the crucial sentence dealing with Xanthippe and Myrto. Cyril's text appears to be an awkward revision of the sentence, which became necessary because of a textual corruption. Theodoret's text is preferable: καὶ τὴν μὲν Ξανθίππην προσπλακείσαν λαβεῖν, ἐξ ἧς ὁ Λαμπροκλῆς ἐγένετο, τὴν δὲ Μυρτῶ γαμηθείσαν, ἐξ ἧς Σωφρονίσκος καὶ Μενέξενος. Socrates is the understood subject of λαβεῖν while Xanthippe and Myrto are its objects, each of which is modified by a participle. The two participles thus express the different circumstances in which Socrates "took up" these two women. He took up Xanthippe "after she became attached" (προσπλακείσαν) to him and Myrto "after she became married" (γαμηθείσαν) to him. Cyril's text reads καὶ τὴν μὲν Ξανθίππην περιπλακείσαν λαθεῖν, ἐξ ἧς ἐαυτῷ Λαμπροκλῆς ἐγένετο. τὴν δὲ Μυρτῶ γάμῳ, ἐξ ἧς Σωφρονίσκος καὶ Μενέξενος. In this case Xanthippe agrees with the feminine participle, περιπλακείσαν, and is the subject of the infinitive, λαθεῖν. The parallel structure would then indicate that Myrto agrees with the same participle understood and γάμῳ is used adverbially in contrast to λαθεῖν. The whole would thus be translated [Aristoxenus reported that] "Xanthippe had sexual relations with him in secret, and from her Lamprocles was born, but Myrto [had sexual relations with him] in marriage, and from her [were born] Sophroniscus and Menexenus." The parallelism between λαθεῖν and γάμῳ is awkward. The most natural explanation would be to suppose that λαβεῖν became corrupted to λαθεῖν by a simple copying mistake. Once this occurred, the passage no longer made sense and was rewritten. The idea of secrecy

suggested that a verb referring to sexual intimacy was needed rather than just a verb suggesting a personal attachment, so περιπλέκω was used instead of προσπλέκω. In addition, since it made little sense to say that Myrto married Socrates in secret (λαθεῖν γαμηθεῖσαν), the second participle was removed so that Myrto was also assumed to agree with the first participle and γαμῶ was inserted to differentiate her from Xanthippe. Clearly the original is what is found in Theodoret.

Aristoxenus' *Life of Plato*

John Dillon

Aristoxenus does not seem to have had much respect or liking for his Master's master Plato. This much is painfully obvious to anyone considering the surviving fragments of his *Life*. The intriguing questions that arise in this connection, however, are the following: why had Aristoxenus conceived this degree of dislike for a man who, one would have thought, should have commanded his respect, if not affection; and, accepting the fact that he did not like Plato, how much of the surviving negative tradition surrounding Plato's life can reasonably be attributed to Aristoxenus? Or, on the other hand, are we perhaps wrong in assuming that his biography of Plato was in all respects negative?

At first sight the recorded remains of Aristoxenus' *Life of Plato* provide fairly slim pickings. In Wehrli's assemblage of fragments, there are no more than eight items listed under this heading (fr. 61–8). Even the most notorious story about Plato emanating from Aristoxenus, that concerning the "Lecture on the Good," while no doubt it appeared in some form in the actual *Life*, in fact as we have it occurs as an illustrative anecdote at the beginning of book 2 of his *Harmonics* (30–1), where Aristoxenus relays it as an ironical anecdote

of Aristotle's, told simply to illustrate the necessity of providing an accurate account of what one is going to speak about in a lecture, lest one disappoint the audience.¹ However, it is my hope that, with some teasing out of the evidence, and the adducing of further probable items from what we may term the "hostile" biographical tradition, a fuller picture may emerge — though much of the evidence will fall considerably short of certainty.

The first passage listed by Wehrli (fr. 61) concerns Plato's military service, and it poses a problem.² Aristoxenus declares, according to Diogenes Laertius (3.8), that "Plato served on three military campaigns, once to Tanagra, a second time to Corinth, a third at Delium, in which last he distinguished himself."³ The one realistically identifiable campaign is that of Corinth in 394, when Plato would have been 33 — the battle in which young Theaetetus is reported as meeting his death, in the introductory conversation of the dialogue bearing his name (*Tht.* 142a-b). If we take the other two alleged venues in order, we are faced at first sight with bafflement. The only Battle of Tanagra known to history is that in 447, when the Spartans beat the Athenians, well before Plato's birth, though comfortably within the period of Socrates' liability for military service (he would have been 23); we could therefore postulate a transference from the *Life of Socrates*. In the case of Delium, the third campaign listed, it does indeed look at first sight like a case of such a transference, even down to the detail of an *aristeia*. But one asks oneself, can Aristoxenus have really been so ignorant of chronology as to place Plato at Tanagra in 447 BCE, and at

¹ We find, admittedly, a somewhat amplified account of this event by the late antique Peripateticizing *rhētor* Themistius (*Or.* 21.245c-d), localizing the lecture in the Piraeus, and saying that people flocked to it from both the city and the surrounding countryside (even from the silver mines!), but relating that when Plato started in on *The Good*, they became confused and left in droves. This sounds as though he is dependent, directly or indirectly, on a more elaborate account, perhaps from Aristoxenus' *Life*. Simplicius too (*In Phys.* 151.8–11; 453, 28–30) gives the detail that Xenocrates, Speusippus, Aristotle, Heraclides of Pontus and Hestiaeus were present, and all wrote up their notes. So Aristoxenus may well have expatiated more fully on the story in the *Life*. Why, indeed, would he not?

² Which, I may say, Wehrli barely glances at in his commentary, p. 67.

³ Καὶ αὐτὸν φησιν Ἀριστόξενος τρίς ἐστρατεῦσθαι, ἅπαξ μὲν εἰς Τάναγραν, δεῦτερον δὲ εἰς Κόρινθον, τρίτον ἐπὶ Δηλίου. ἔνθα καὶ ἀριστεύσαι.

Delium in 424 (when he was only three!), as well as placing the Delian campaign *third*, after Corinth?

A simple solution, I suppose, would be that it is Diogenes Laertius, who is, as is well known, a bear of little brain, that has performed the switch between the biography of Plato and that of his master Socrates; but such a gaffe would, I think, be a little too much even for Diogenes. The only alternative that I can see, for those who are unwilling to condemn either Aristoxenus, or even Diogenes, to such imbecility, is to suppose that Aristoxenus actually knew rather more than we do about the obscure campaigns of the forces of the anti-Spartan allies before and after the battle of Corinth in the period 395–4, and that there were engagements at both Tanagra and Delium in that period. We know of a confrontation with Lysander at Haliartus in 395, in which the Athenians took part, and Lysander came off worse, but no mention of Tanagra in that connection; and we know of a confrontation with Agesilaus later in 394, at Coronea, at which the Spartans won a technical victory — but again, no mention of Delium. These are pretty desperate conjectures, then, and they involve regarding these three incidents as separate instances of military service, instead of just one period of service. I see nothing else for it, however, if we are not to dismiss this report as dismal rubbish.⁴ At all events, it does not come across as a *hostile* or disparaging report on Aristoxenus' part, and that is of some interest. It would also seem to indicate that he concerned himself with Plato's life as a whole, and not just a series of isolated derogatory anecdotes.

The next group of testimonia deal with Plato's journeys to Sicily and his sojourn at the court, first, of the tyrant Dionysius I and then of his son Dionysius II. In truth, the testimony provided is slim enough, consisting as it does of an extract from a satirical dialogue by Lucian, *The Parasite, or The Parasitic Art*, in the course of which (31ff.) the parasite, Simon, expatiates on the proneness of philosophers to play the parasite. After mentioning Aeschines of Sphettus and Aristippus as two philosophers who ran off to Sicily to profit from the hospitality of Dionysius I, he turns to Plato (34 = fr. 62 Wehrli):

⁴ Aelian also, we may note, at *Varia Historia* 7.14, after mentioning Socrates' campaigns, lists Plato as serving at Tanagra and Corinth, though he omits Delium.

Aristippus, indeed, appears to have been a worthy ornament to the art; but your most noble Plato also came to Sicily for this purpose, and after being parasite to the tyrant for a few days, was sacked for ineptitude (ὕπὸ ἀφυσίας ἐξέπεσε). Then, after going back to Athens and working hard and preparing himself, he cruised once more to Sicily on a second venture, and again, after only a few days of dining, was sacked for stupidity (ὕπὸ ἀμαθίας ἐξέπεσε); and this “Sicilian disaster” of Plato’s is considered equal to that of Nicias.

When his interlocutor, Tychiades, enquires as to his authority for this allegation, Simon replies:

A great many, but in particular Aristoxenus the musicologist, who is a most worthy authority (πολλοῦ λόγου ἄξιος). (trans. Harmon, slightly emended)

Behind this rather general, and thoroughly satirical, reference, there may be actually concealed quite a lot, if one is inclined to pursue it. First of all, it seems to me that, if Aristoxenus referred to Plato’s being “sacked,”⁵ there is no way that we can avoid the conclusion that he also told, in some form, the famous story of Plato being handed over by Dionysius to the Spartan admiral Pollis to be sold into slavery. This bizarre story, as we have it, is traceable back no further than Philodemus’ *History of the Academy* (10.16–24), though there, in a rather fragmentary passage, we find mention of an indignant Dionysius handing Plato over to “certain traders from Lacedaemon,” rather than, as Plutarch, for instance tells it, in the *Life of Dion* (5.5–6),⁶ to the above-mentioned Admiral Pollis, whom Dionysius secretly instructed “either to kill Plato on the voyage, or if not, at all events to sell him into slavery.” Pollis, we are asked to believe, chose the enslavement option, and delivered Plato to Aegina, which was a Peloponnesian ally and at war with Athens at the time, to be sold as a slave. Plato is duly put up for sale, and bought by a nobleman of Cyrene by the name of Anniceris, who is there on his way to compete in Olympic Games (presumably those of 386). Anniceris then frees Plato and sends him

⁵ *Ekpiptein*, as the passive of *ekballein*, has the connotation of ignominious dismissal. It can be used of actors being hissed off the stage, for example. Of course, this terminology may not be that of Aristoxenus himself, but rather of Lucian (see below).

⁶ Cf. also Plu. *De Tranq. An.* 471e, Diogenes Laertius, 3.19, and Olympiodorus, *In Gorg.* 41.8.

back to Athens, declining to accept the ransom-money which Plato's friends offer him. They devote this money (amounting to thirty minae), to purchasing a suburban villa adjacent to the Academy park, wherein to establish the Platonic School.

This is indeed a bizarre story, and it has plainly grown legs in the telling. I am inclined to feel that there may be a possible "rational" version of it, to wit, that Dionysius (whether in a huff or not) did indeed ask Pollis to give Plato (who was himself, of course, a pronounced philo-Laconian) a lift home, but then Pollis found that, owing to the war situation, he could not safely deliver Plato any closer to Athens than Aegina, and left him off there. What neither of them knew, however, was that the Aeginetans had recently passed a law decreeing that every Athenian who came into their power should be sold as a slave;⁷ and so the story unfolded from there.

Even thus rationalized, however, it remains a very odd tale.⁸ The interesting question, however, from our present perspective, is whether we can impute its telling to Aristoxenus, and if so, in what form. It seems to me that we can, since it will have taken place 70 or 80 years before the time of his composition of the *Life*, and whatever really happened may well have been obscured by legend by Aristoxenus' time. We may note here also that the whole story of Plato's confrontation of the crusty old tyrant, especially in the form that we have it in Plutarch's *Life of Dion* (5.1–2) does not reflect badly on Plato — he is presented as discoursing on the distinction between the life of the good king and that of the tyrant, to the increasing annoyance of Dionysius — and we might conclude that Aristoxenus' purpose in telling it was not downright hostile, but merely tinged with irony — as indeed is his tale of the Lecture on the Good. The tale of the enslavement, if indeed it stems from Aristoxenus, might seem at first sight more

⁷ Admittedly, there is unfortunately not, to my knowledge, any record, epigraphic or otherwise, of such a decree, either in Aegina or elsewhere in the classical Greek world, but there is nothing at all unlikely about it.

⁸ Although being captured by pirates, and held to ransom, or sold into slavery, was not by any means an unexampled fate for Athenians at this period; cf. the ingenious scam practiced on Apollodorus by the villainous Nicostratus, as related by Apollodorus in his indictment of the latter ([Dem.], *Against Nicostratus* 4–9). Since the tale of enslavement and ransom is intimately bound up with the purchase of a site for Plato's School, it is hard to dismiss it out of hand.

derogatory, but in fact does not redound to Plato's discredit, though it might be given a satirical twist.

We have no other attested testimony to Aristoxenus' treatment of Plato's Sicilian adventures, though it would seem from the satirical reference in Lucian that he dealt also with at least Plato's second trip to visit Dionysius II (as, indeed, how could he not have?). If we accept the Lucianic account, Aristoxenus will then also have told of Plato's unsuccessful attempts to make a philosopher-king out of the younger Dionysius. Once again, however, the story does not necessarily redound to Plato's discredit, though it might lend itself to an ironical treatment. It is the machinations of the courtiers and Philistus, as Plutarch tells the story,⁹ that turn Dionysius against Dion, and result in the latter's being driven into exile, while Plato continues to be honored, though under virtual house arrest, until ultimately sent home at his own request. If the derisive phrase in Lucian, "sacked for stupidity" (ὕπὸ ἀμαθίας ἐξέπεσε), were a reflection of Aristoxenus' account, it would suggest that Aristoxenus attributed Plato's defeat to his naiveté, in being out-manuevered by the courtiers; but again, if so, that is hardly a damning criticism; and in any case, it is on the whole more probable that the satirical terminology is that of Lucian himself, rather than deriving from Aristoxenus.

The same goes for the third expedition, as told by Plutarch in chapters 19–20, where Plato has to be rescued by Archytas, but once again behaves in no way dishonorably, having gone over only to secure the restoration of Dion. Again, he could be accused of naiveté and unworldliness, but that is all.

Finally, we have preserved by Plutarch in his *Life of Timoleon* (ch. 15 = fr. 32 Wehrli), a remarkable testimony from Aristoxenus, presumably (though I suppose not certainly) from his *Life of Plato*, of a personal encounter which he had with the exiled Dionysius II in Corinth, presumably in the late 340's or early 330's, where he ventured to ask the ex-tyrant about Plato:

Further, when Aristoxenus the musicologist and certain others inquired what his (sc. Dionysius') complaint against Plato was and what its origin, he told them that, of the many evils with which tyranny abounded, there was none so great as this, that not one of those

⁹ *Dion*, chs. 14–6.

reputed to be friends speaks frankly with the tyrant; for indeed it was by such friends that he himself had been deprived of Plato's goodwill. (trans. Perrin, slightly emended)

This is a most interesting snippet, in many ways. First of all, we have a vision of the young Aristoxenus — and a group of like-minded companions — visiting Corinth with a view to setting up an interview with the now elderly ex-tyrant, primarily, perhaps,¹⁰ to grill him about his encounters with Pythagoreans, but also to clear up some questions about his relations with Plato. Then, there is no indication that this question about Plato was asked in pursuit of any malicious agenda, rather than out of simple curiosity as to what had gone wrong. Certainly, the reply given redounds very much to Plato's credit (as well as, incidentally, to that of Dionysius).

The next snippet that is recorded of Aristoxenus' *Life* (fr. 64–5 Wehrli) is, like the first, a troublesome one, in that it seems at first to constitute a distortion of historical reality such as one would think impossible for a contemporary, however malevolent. It is the assertion that, during Plato's lifetime, and presumably during his absence in Sicily (probably on his third trip), Aristotle had already set up a rival school in the Lyceum. Now we know that he did this much later, after failing to be elected Head of the Academy, following on the death of Speusippus in 339, but this other assertion seems manifestly false. What could be behind it, if anything?

The earliest testimony to the story may hold the clue. Eusebius (*PE* 15.2), relaying the second century CE Peripatetic Aristocles, who is the author of a rather tendentious history of philosophy, the primary aim of which seems to have been to subordinate Plato to Aristotle, reports that Aristoxenus tells us that, while Plato was away, "some foreigners (τινας ... ξένους ὄντας) set up a rival establishment in the form of the Peripatos" (ἐπανίστασθαι καὶ ἀντοικοδομεῖν αὐτῷ ... Περίπατον). Eusebius adds that "some think that he is saying this about Aristotle, as Aristoxenus consistently favors Aristotle." Our other authority, which is the *Life of Aristotle* in its various versions, picks this up as referring to Aristotle, and indignantly denies it, as a slander propagated, first by Aristoxenus, and then by Aristides

¹⁰ Cf. the account preserved by Iamblichus (*VP* 233 = fr. 31 Wehrli), of Aristoxenus, in his *On the Pythagorean Life*, questioning Dionysius about Damon and Phintias.

(meaning the 2nd cent. CE, sophist Aelius Aristides). But their indignation may be misplaced. Aristocles, after all, speaks only of “certain foreigners.” Aristotle was certainly a foreigner, but he was by no means the only one in the Academy, as we know.

It was a procedure by no means unknown in later times for a disaffected pupil or pupils to walk out of a philosophical school and set themselves up elsewhere. We are told,¹¹ for instance, of a minor crisis in the Academy under Polemon, when Crantor fell ill and retired for a while to the temple of Asclepius, where he “walked about” (περιεπάτει), a move which some, including Arcesilaus, took as constituting a defection, and accordingly they went to join him. It was all a misunderstanding in this case, but we can see that the model was there. At any rate, something of the sort may have happened during Plato’s third trip to Sicily in 361/0, when he left Heraclides of Pontus in charge of the school, a move that may not have been to everyone’s liking — including Aristotle’s, who may have felt that the honor should have been conferred upon *him*. Certainly, there is evidence (from a significant anecdote preserved by Aelian, *VH* 3.19, probably deriving from Antigonos) that Aristotle had his own “faction” within the Academy, and had a reputation for hassling the elderly Plato:

Once, when Xenocrates went off on a visit to his homeland (sc. Chalcedon), Aristotle set upon Plato, surrounding himself with a gang of his own partisans, including Mnason of Phocis and people like that. Speusippus at that time was ill, and for this reason was unable to stand by Plato. Plato was by now eighty years of age¹² and at the same time, because of his age, was to some extent losing his memory. So Aristotle devised a plot and set an ambush for him, and began to put questions to him very aggressively and in a way “elenc-tically,” and was plainly behaving unjustly and unfeelingly. For this reason, Plato left the concourse outside, and took to walking about inside with his companions.¹³

Xenocrates eventually returns, and puts the situation to rights, scolding Speusippus for not defending Plato properly, and bringing Aristotle to

¹¹ By Diogenes Laertius (4.24), probably following Antigonos of Carystus.

¹² This would place the incident in 348/7.

¹³ This is obscure, but may refer to his abandoning the public Academy park and retiring to his villa. However, it matters little in the present context.

heel. Such a story, in the form in which we have it, would be quite unsuitable to Aristoxenus' purposes — it is much more characteristic of a gossip-monger like Antigonos of Carystus — but it serves to illustrate the underlying tensions in the Academy which could at some stage have led to a (temporary?) secession. The *xenoi* concerned could well have included “Mnason of Phocis and people like that” (καὶ ἄλλοι τοιοῦτοι). At any rate, we need not, I think, conclude from this piece of evidence that Aristoxenus is guilty of reckless distortion of the facts; rather, it is probable that we are faced with the product of later misunderstandings. Nor, one may add, is it clear that the story is in any way derogatory to Plato — except to the extent that it suggests that not everybody was satisfied with his teaching, or perhaps his administrative arrangements.

A further apparently wild assertion by Aristoxenus stems, once again, from that master of muddle, Diogenes Laertius — here following, admittedly, Favorinus of Arles. He tells us, at 3.37 (= fr. 67 Wehrli), that Aristoxenus asserted that “practically all of Plato's *Republic* is to be found written down in Protagoras' *Antilogika*” (πάσαν σχεδὸν ἐν τοῖς Πρωταγόρου γεγράφθαι Ἀντιλογικοῖς). This assertion appears so preposterous that, once again, historians of philosophy have simply left it aside as beneath contempt (Wehrli himself barely glances at it, p. 67). But once again, it may be worth our while to look closer. There is really no point, after all, in making allegations that are so discordant with the facts as to be immediately disprovable, at least by anyone who had access to both of the works mentioned, as would be the case with Aristoxenus' contemporaries. Can we, therefore, conceive of any reasonable version of this claim?

The distinguished Italian scholar Mario Vegetti, a number of years ago, addressed this question,¹⁴ and made a valiant effort to discern anticipations of the theories proposed by Socrates as to the origins of the state in book 2 and the nature of a suitable education in book 3 in proposals made by Protagoras in his Great Speech in the *Protagoras* (320c–328c), and there may be something in that, but the problems are (a) that the Great Speech itself — though I would accept that is probably based on some work of Protagoras — is as it stands a composition by Plato, and (b) that the features that he identifies in the *Republic* as

¹⁴ Vegetti (2004).

reminiscences of Protagoras do not seem to me to constitute a “smoking gun.”¹⁵

Of course, this is not to say that Aristoxenus might not have discerned sufficient similarities between such passages and some presumed Protagorean original of the Great Speech for him to lay a polemical allegation of plagiarism, but the fact remains that the work of Protagoras that he is reported as having picked out as the source of the plagiarism is not any of his political works, but specifically the *Antilogika*. In view of that, I think that we may be able to discern something else that might have attracted his attention, at least if we could assume that he is focusing primarily on *Republic* 1, and in particular on Socrates’ *elenchus* of Thrasymachus. Is there anything in that conversation that might conceivably be connected to this particular work of Protagoras? To answer that, we must, first of all, review what we know of his *Antilogika*, or *Antilogiai*. From Diogenes Laertius, in his *Life of Protagoras*, we learn the following:

He was the first to declare that there are two possible positions on every question, opposed to each other; and indeed he was the first to present arguments along these lines... [53] He was also the first to institute the Socratic method of argument, and he was the first, as we learn from Plato in the *Euthydemus*, to make use of the argument of Antisthenes that seeks to demonstrate that contradiction is impossible; and he was the first to demonstrate dialectical methods of attack on any given thesis (D.L. 9.51 and 53)

The claims that there are two possible opposing positions on any question, and that contradiction is impossible, might seem at first sight

¹⁵ For instance, there does not seem to me any close connection, such as he suggests, between Glaucon’s “genealogy of morals” in 2.358c–359c and Protagoras’ mythological account of the bestowal of *aidōs* and *dikē* upon men, in order to enable them to live in communities (*Prot.* 322b–d), even if one were to provide a de-mythologized version of this, as Protagoras had offered to do. Again, I can see no close connection between Protagoras’ remarks on *dikaïosynē* and *sōphrosynē* at 323a–c, and the account of justice developed in *Rep.* 4, esp. 443b–444a; while the praise of music and gymnastics as suitable training for the young pronounced by Protagoras at 326a–c is surely obvious enough not to be required as a source for Plato’s prescriptions in book 3, though it accords with them very well. In any case, such details would much more likely derive from such a work of Protagoras as *On the State*, or *On the Original State of Things* than from the *Antilogika*, which is what is being alleged as a source by Aristoxenus.

to conflict, but they are really just two sides of the same coin, especially if one bears in mind that for Protagoras all “truth” is relative; indeed, one could say that the latter claim reinforces the former. In the *Euthydemus* (285d–286c), the sophist Dionysodorus “proves” to young Ctesippus that contradiction is impossible, since if two people give the same *logos* about something, they are in agreement about that thing, whereas if they give different *logoi*, then they are talking about different things, or states of affairs; so there is no contradiction. Such an argument is credited by Socrates also to “Protagoras and his followers” (οἱ ἀμφὶ Πρωταγόραν, 286c), and it would not preclude presenting opposing arguments on any given topic, as it could be maintained that the two arguments actually concern different topics, e.g., if one asserts (a) that pleasure is the only good, and (b) that pleasure is not a good at all, it could be shown that you are dealing with different concepts of pleasure, and thus different subjects.

So the *Antilogika* presumably presented a series of arguments for and against a number of theses, in order to demonstrate how this might be done. We have no idea, unfortunately, what those theses might have been, but it might be worth casting an eye over Socrates’ arguments with Thrasymachus to see if any could be cast in the form of an *antilogia*.

Let us consider, for example, the first argument (338c–342e): Justice is the interest of the stronger. Socrates’ undermining of Thrasymachus’ position by pointing out, first, that governments often make decrees that turn out to be contrary to their own best interests, and then that rulers, like doctors and ship’s captains, in giving orders, act primarily for the sake of those in their care, can be cast, without too much difficulty, into the form of an antilogy: Justice is the advantage of the weaker (342c). The same exercise might be performed for the argument that injustice is more profitable than justice (343a–350c), against which Socrates presents the counter-argument that the unjust man, in continually trying to “overreach,” and exceed the mean, resembles stupid rather than clever people, and acts against his own best interests; and then the argument (350c–352d) that complete injustice will render any group or even individual non-functional. The topic of justice versus injustice would be just the sort of issue that Protagoras might have been expected to focus on, one would have thought, for rhetorical purposes, and the adaptation of some such arguments by

Plato could be seen, not so much as plagiarism, but rather as a subtle form of one-upmanship — indeed, something of a back-handed compliment to a man for whom Plato actually had a considerable respect.

One might suggest, then, that Aristoxenus' allegation, though no doubt tendentious in the extreme, may not have been without some foundation, at least as regards the arguments of book 1, and recognition of this might serve to deepen our understanding of Plato's complex relation to Protagoras, a thinker that he certainly respected, while feeling that he needed to be firmly countered.

A final detail is of some interest also, although, like the story of the Lecture on the Good, it does not seem to have featured in Aristoxenus' *Life of Plato*. This is a report relayed by Diogenes Laertius (9.40 = fr. 131 Wehrli) from Aristoxenus' *Historical Memoirs* (*Historika Hypomnēmata*) that Plato wanted to make a bonfire of all the works of Democritus that he could lay his hands on, but that the Pythagoreans Amyclas and Cleinias dissuaded him from this on the grounds of its futility, since copies of the books were widely available. This anecdote is, once again, mildly satirical in tone, but I see nothing wildly improbable about it, Democritus being Plato's least favorite figure among philosophers. The mention of the two Pythagoreans by name lends it a measure of verisimilitude.

All in all, then, we have here some slight intimation of a work of Aristoxenus of which we may regret the loss. It would seem that he had no great affection or reverence for Plato, but such evidence as we have indicates that he produced a reasonably informative and not entirely unbalanced job, the more apparently bizarre aspects of which, on closer inspection, can be seen to yield useful data. Aristoxenus was a follower of Aristotle and a partisan of the Pythagorean tradition, the latter of which he seems to have felt Plato had appropriated, without due acknowledgement, for his own purposes. As for the former, he would appear to have inherited from him a certain degree of irreverence towards the Master, of which the tale of the Lecture on the Good is an example, but which pervades Aristotle's surviving works in varying degrees.

Two examples may suffice, to indicate something of the atmosphere of (moderately affectionate) irreverence that Aristotle would have fostered among his followers, both from the *Metaphysics*: One from book A, the other from book M.

In the first instance, at A 6 988a2ff., Aristotle is rounding off his critique of Plato's first principles, the One and the Great-and-Small (which he affects to believe is *two* things, rather than the single Unlimited of the Pythagoreans¹⁶), and directs a criticism at the Platonic theory of generation of physical objects by the action of Form on Matter, by adducing an argument from the facts of craftsmanship and of biology:

The situation, however, is just the reverse, and the theory is illogical; for whereas they (sc. the Platonists) derive multiplicity from matter, although their Form generates only once, it is obvious that only one table can be made from one piece of timber (*ek mias hyles*), and yet he who imposes the form upon it, although he is only one individual, can make many tables. Such too is the relation of male to female: the female is impregnated in one coition, but one male can impregnate many females. And yet these relations are analogues (*mimēmata*) of the principles referred to. (trans. Tredennick, slightly emended)

Here is Aristotle the bluff and no-nonsense scientist exercising his irony on the fantastical postulations of Plato and his more faithful followers. The examples he gives are only *mimēmata* of the causal activity of the Forms if one imposes on them Aristotle's own philosophical perspective.¹⁷

Similarly ironic, and still on the subject of Forms, is a passage from book M (1078b32–1079a2), part of the extended critique of Platonist number-theory, which follows on his "historical" explanation of the genesis of the Theory of Forms as a reaction to the Heraclitean view that all sensible things are in a permanent state of flux:

For it followed for them, almost by the same argument, that there

¹⁶ It is, of course, a Dyad, in the sense of a source of two-ness and multiplicity generally, but it is thoroughly tendentious to imply that it is itself two things. If Plato used the term τὸ μέγα καὶ μικρόν—probably not τὸ μέγα καὶ τὸ μικρόν as Aristotle would have it! — he will have meant something that tends indefinitely towards each extreme on a spectrum until having Limit imposed upon it by the One — and I suspect that Aristotle understands that perfectly well.

¹⁷ That is to say, from a biological perspective, it is indeed characteristic of the female to conceive only once at a time, while the male is multiple in his impregnations — and indeed produces a multiplicity of seeds at a coition, of which only one will be utilized by the female.

are Forms of everything to which we apply general terms — rather as if someone who wanted to count things thought that he would not be able to do so while there were only a few, but made more before counting them. For the Forms are, if anything, more numerous than sensible particulars (though it was in seeking causes for the latter that they went on from them to Forms).

The picture of the Platonists as resembling people thinking that it would be easier to count sheep in a field if there were twice as many of them gives us, I think, a nice insight into the tone taken by Aristotle in his lectures in the Lyceum when dealing with the aberrations of his former colleagues in the Academy across town, and this, laced no doubt with other irreverent anecdotes about Platonic unworldliness on the lines of that about the Lecture on the Good, would have formed a good basis for what seems to be the prevailing tone of Aristoxenus' biographical sketch. But on the whole, it seems to have been something less than a full-blown hatchet job.¹⁸

¹⁸ I wish to record my gratitude to Carl Huffman for many useful suggestions as to the form and subject matter of this paper, which have undoubtedly greatly enhanced whatever value it has.

Aristoxenus and the Early Academy

Andrew Barker

1. Introduction

There is no shortage of scholarly work on the relations between Aristoxenus' work on music and the philosophy of the Lyceum, but there has been rather little research, so far as I know, into whatever interactions there may have been between his investigations and those of his precursors and contemporaries in the Academy. It is surely worth asking whether such interactions did indeed take place, and how Aristoxenus reacted, if he did, to the Platonists' arguments and doctrines. It would also be interesting to know how contemporary Platonists reacted to his. In this paper I shall try to say a little about both sides of the question. I must emphasize that this essay discusses Aristoxenus only in his guise as a writer on music. I shall not be concerned with his biographical writings, his work on Pythagorean philosophy, and so on, except in so far as they too have connections with musical issues.

A list of the likeliest suspects in the Academy of this period would include Plato himself, Philip of Opus, Speusippus, Heraclides of Pontus and Xenocrates — perhaps others too, about whom we have less

information. Of these people, Plato, Speusippus and probably Philip were dead before Aristoxenus joined Aristotle in the Lyceum, and Heraclides had left Athens when Speusippus died; the dominant figure in the Academy throughout the relevant part of Aristoxenus' career was Xenocrates. So of the people on this list, only Xenocrates (and just possibly Heraclides) could have known Aristoxenus' work and responded to it; but he, of course, may have been well aware of all of theirs. What can be said in a preliminary way, then, about the relations between Aristoxenus' work and that of these early Academics? It would be extraordinary, I suggest, if there were none at all.

To begin at the beginning, we have solid textual evidence that Aristoxenus was familiar with musical discussions in some of Plato's dialogues — certainly the *Republic*, almost certainly the *Laws*, probably the *Philebus* and possibly the *Phaedrus*; he is also very likely to have known the passage on the World-Soul in the *Timaeus*, though there is nothing to prove it. I shall say a little about the way he treats some of them; but after that point certainties will rapidly give way to speculations, flying by the seat of their pants with various degrees of plausibility. Philip is, of course, best known as the probable author of the *Epinomis*, a work that contains some odd manoeuvres with numbers relevant to musical theory; but there is no evidence to encourage the hypothesis that Aristoxenus took any notice of them. We can put him aside. Heraclides wrote a substantial amount about music, and one might expect Aristoxenus to have been familiar with it; and we might imagine, too, that information about a young specialist in music at the Lyceum could have reached the ears of Heraclides in far-away Pontus. I suspect that one might work up a colourable story along these lines, mainly on the basis of material in Athenaeus and in the pseudo-Plutarchan *De musica*, which draws heavily on Heraclides and Aristoxenus for its materials; but although one might draw interesting comparisons between the two writers' views about music and their approaches to musical issues, I have found no traces of direct interactions between them, and I shall relegate Heraclides to the side-lines too. Apart from Plato himself, that leaves us with only Speusippus and Xenocrates; and in their cases I think there are possibilities that are worth discussing.

2. Plato

Let us begin with our feet planted on the only solid ground we have, our evidence about Aristoxenus' reactions to what he read in Plato's dialogues. It would not be surprising if Aristoxenus had mixed feelings about Plato's reflections on music. At a general level he would have approved of his musical conservatism and his contempt for the allegedly meretricious charms of the stuff churned out by modern composers and performers. There are also indications of more specific points of agreement. Aristoxenus' statement at *Harm.* 69.1–5,¹ for example, may perhaps reflect his understanding of Plato's complicated discussion at *Philebus* 17a–d. I shall argue below that Aristoxenus seems to have taken a leaf or two out of the *Laws* in his discussion of musical judgement; and other scholars have suggested that the passage in which he does so draws also on ideas propounded in the *Phaedrus*. But he would certainly have taken a dim view of Plato's pronouncements on harmonics in book 7 of the *Republic*² and of his uses of harmonic theory in the *Timaean* (but we have no evidence that he commented on the latter explicitly). As to his remarks on the proposals about musical education in the third book of the *Republic* ([Plut.] *De mus.* 17 = fr. 82 Wehrli), it is hard to decide whether they are critical or approving or merely neutral, since (as I explain in my other essay in this volume) they can be construed in either of two ways. In that essay I give reasons for preferring one of them, but for present purposes it is worth considering both possibilities.

According to the first, the passage shows Aristoxenus in characteristically waspish vein. The writer of the *De musica* is explaining why Plato rejected the Mixolydian and Lydian *harmoniai* while accepting

¹ "Each item in music must be specified and set in its place among the sciences in accordance with the respect in which it is determinate, and in so far as it is indeterminate it must be left aside."

² Thus at *Harm.* 32.18–33.1 Aristoxenus draws a similar contrast between existing approaches to harmonics to the one we find at *Rep.* 530c–531c, but criticizes one of them (the "mathematical" approach) in a radically different way — one that would include Plato's own conception of the science among its targets. Correspondingly, the empirically based form of harmonics of which he declares himself the champion falls within the range of those that the *Republic* denounces, regardless of the philosophical and scientific sophistication which distances it in other respects from the examples that Plato knew.

the Dorian. "It was most certainly not, as Aristoxenus asserts in the second book of his *Mousika*, because he was ignorant of the fact that those others too have some usefulness in a guardian-led *politeia*" (fr. 82 Wehrli = *De mus.* 1136f). The writer next adds some remarks defending Plato's musical credentials and accounting for his preference for the Dorian; and he then continues: "He was not ignorant of the fact that many Dorian partheneia had been composed by Alcman and also by Pindar, Simonides and Bacchylides, and *prosodia* and paeans too; and that laments in tragedy were sometimes set in the Dorian *tropos*, and also some *erōtika*." The parallel phrasing assures us, on this reading, that the witness for the prosecution who claimed that Plato was indeed ignorant of all these things is still Aristoxenus. Plato, he alleged, not only failed to appreciate the social value of the Lydian and Mixolydian, but in embracing the Dorian naively overlooked the fact that by no means all Dorian music is bracingly martial in character. It is a trained and experienced musical professional's retort to the philosophical ramblings of a musical amateur.

On the second interpretation (which I defend in my other essay), the thesis that Plato was not ignorant about these points was propounded by Aristoxenus himself, and he is not at this point criticizing Plato's views on the *harmoniai*. We might, in fact, judge that he is implicitly commending them. The reasons given in chapter 17 for Plato's preference for the Dorian — that he admired its solemnity (*to semnon*) and that he thought that *spondeia* and songs in honor of Ares and Athena were sufficient for his purposes, since they strengthen the soul of a temperate man — are certainly ones which Aristoxenus would have found broadly congenial. We might also note that he is treating Plato in precisely the same way as he treats the "ancient" composers mentioned in the following chapters, whose adoption of the simpler musical styles that he admires, we are told, was not motivated by ignorance of others; but this is not a sure sign of his approval, since in [Plut.] *De musica* 21 he assimilates "decadent" fourth-century composers such as Antigeneidas to the same company.

Passages later in the *De musica* show, however, that Aristoxenus had more general and more interesting reasons for rejecting Plato's whole approach in this part of the *Republic*, though Plato is not mentioned by name, and the comments would have equal force against some of Aristotle's assertions in the last book of the *Politics*. The point

is, in fact, implicit in the remarks we have just been considering: if the Dorian structure can properly and effectively be used in laments and love-songs, for instance, as well as songs suitable for valiant warriors, it is obvious that the *harmonia* in which a melody is set can be no guarantee of the nature of its *ēthos*, as Plato apparently imagined, at least when he wrote *Republic* 3. At various points in the *De musica*, especially in chapter 33, Aristoxenus insists that a composition's *ēthos* is not determined by any or even all of the ingredients that can be subjected to technical analysis, such as its *harmonia* and its rhythmic structure. It depends entirely on how the composer has put these formal ingredients to use.³ To put the point as crudely as possible, it is not the Dorian *harmonia* as such that gives a Spartan war-song its martial flavor, but the way in which it is handled, in smooth scalar sequences or in vigorous leaps and bounds, for instance, the way it is combined with particular rhythms, its setting of the words, its tessitura, its uses or its lack of modulations, and no doubt other things besides. In isolating a *harmonia* or a rhythm as a determinant of *ēthos* in its own right, Plato was barking up entirely the wrong tree.

But as the Aristoxenian discussion in the *De musica* continues, it begins to betray some respect for certain aspects of Plato's musical thought, not this time in the *Republic* but in the *Laws*. The key passage of the *Laws* is in book 2, at 667b–670e, where Plato's Athenian speaker is setting out the criteria by which a piece of music should be judged, and the qualifications a person needs in order to judge reliably. I can offer no more than a quick summary here. In the opening phase of the discussion (667b–669b), he begins by arguing that since all music is *mimesis*, the amount of pleasure it gives should not be used as a criterion of its merits; rather, the first question we need to ask is whether it is "correct" in its imitation, that is, whether it is an accurate likeness of the object imitated. Secondly, in order to do this he must have a clear and detailed understanding both of the composition in question and of the object of which it is supposed to be a *mimesis*. But thirdly, even this amount of knowledge does not guarantee that the person will be able to judge, reliably, whether the composition is good (*kalon*); and this is the question that really matters.

³ These issues are discussed more fully in my other essay in this volume; cf also Barker (2007a).

After an excursus on why the business of musical judgement is so difficult, which we can pass over (669b–670a), the Athenian adds a little more to what he has said about the task of judging a composition's "correctness." To be equipped for this task, he says, the judges "must perceive well and recognize [or perhaps "understand"] both the rhythms and the *harmoniai*" (τῶν γὰρ ῥυθμῶν καὶ τῶν ἁρμονίων ἀναγκαῖον αὐτοῖς ἐστὶν εὐαισθήτως ἔχειν καὶ γινώσκειν, 670b). It seems clear to me that two different accomplishments are involved here, the ear's immediate perception of the music's details on the one hand, and the mind's ability to "recognize" or "understand" them on the other, that is, to identify precisely their musical nature and functions; and this latter ability must demand something like a scientific grasp on the technicalities that belong to the disciplines of rhythmic and harmonics. If the judges are equipped in this way, they will be in a position to "follow" (*synakolouthein*) every rhythmic and melodic ingredient in the piece.

But, he goes on, the purpose of all this is to enable them to select accurately those pieces of music that are suited (*prosekonta*) to their purposes, and which it will be "appropriate" (*prepon*) for people of the relevant age and character to sing; and to do this they must go even further. If they have the right qualifications to make a selection on this basis, they will have had a much better training not only than ordinary people but even than the composers themselves. The latter must certainly understand all about melodies and rhythms, but it is by no means inevitable that they will be able to move up to the final level of judgment: "for a composer need have no knowledge of the third matter, whether or not the resulting imitation is *kalon*" (τὸ γὰρ τρίτον οὐδεμία ἀνάγκη ποιητῇ γινώσκειν, εἴτε καλὸν εἴτε μὴ καλὸν τὸ μῖμημα, 670e). But the Athenian tells us nothing about the means by which the ability to make this all-important judgement can be acquired.

The Aristoxenian discussion of musical judgement in chapters 32–6 of the Plutarchan *De musica* differs from Plato's in several important ways, the most obvious of which is that it does not even mention the concept of *mimēsis*, and says nothing whatever to suggest that music is "imitative," a thesis on which the whole of Plato's reasoning depends. But in other respects there are striking similarities. Aristoxenus, like Plato, asserts that anyone who is to distinguish what

is appropriate from what is not must have three distinct kinds of competence (Aristoxenus' word for "appropriate" is *oikeion* rather than Plato's *prepon*, but there is no detectable difference in sense). First, where Plato says that the judge must grasp the nature of the object of the *mimēsis*, Aristoxenus says he must be able to identify the *ēthos* at which the composition is aiming, τοῦ ἤθους οὐ ἔνεκα ἢ σύνθεσις γεγένηται ([Plut.] *De mus.* 1143d7). The two assertions are obviously not identical; but since for Plato the object of the *mimēsis* is the fundamental bearer of the *ēthos*, or indeed is the *ēthos* itself,⁴ there is, in fact, a close correspondence between them. Secondly, according to Aristoxenus the judge must be able to distinguish the ingredients from which the composition has been put together, τούτων ἐξ ὧν ἢ σύνθεσις (1143d8), just as for Plato he must recognize each of its details (*Laws* 668c); and it becomes clear that — as one would expect from the *Elementa harmonica* and as Plato too implies — this latter ability involves both the trained exercise of one's musical ear and a thorough knowledge of the technicalities of rhythmic and harmonics. Perception and reason, Aristoxenus says, must cooperate with one another and "run along together" (*homodromein*, 1144a) in the business of "following" the complex course of a composition, where his term for "following," *parakolouthein* (1144b), is little different from the one we have found Plato using in a similar context, *synakolouthein*.

Thirdly, Aristoxenus' central theme, as I mentioned earlier, is that none of this is enough to equip us fully for the task of musical judgement, since none of the technical disciplines have anything to tell us about *ēthos* or "appropriateness"; and this in turn matches Plato's insistence that trained perception and an expert grasp on the musico-logical minutiae cannot by themselves give anyone the qualifications needed to pronounce on whether a composition is *kalon*. The two writers' treatments at this point have another rather striking similarity, in that neither of them addresses a question that seems to be of the first importance; neither gives us any help in understanding what these top-level qualifications are and how they can be acquired. The present passage of the *Laws* says nothing about the matter at all; and the most we can find in this part of the *De musica* is the earlier remark, in chapter 32, that a person who is trying to make a fine and discriminating

⁴ Compare *Laws* 668a9–b2 and 670e4–5 with *Rep.* 400c7–e3.

use of music (μουσική καλῶς καὶ κεκριμένως χρῆσθαι) must *inter alia* supplement music with “the other disciplines (*mathēmata*) and take philosophy as his guide” (1142c-d). But there are at least three reasons for being wary of making much of these assertions. In the first place we may well suspect them of being Platonist intrusions into an Aristoxenian context (based, presumably, on material in book 7 of the *Republic*), rather than further examples of Platonizing on the part of Aristoxenus himself; secondly, the topic under discussion here may well not be the accomplishments of a reliable judge of music, but those of a good composer; and thirdly, the comments are altogether vague — we are given no clue, in particular, about the nature of the “philosophy” that one is to take as one’s guide.

I suggest, then, that there are solid grounds for thinking that in important respects Aristoxenus has modelled his account on Plato’s. Despite their differences, they are closely related in content and even more strikingly parallel in structure; and as I have just explained, they both seem to stop short of completing their enquiry and do so at exactly the same point. Of course, we know that Aristoxenus rejected out of hand the style of harmonic theory which Plato championed and attacked him in other contexts too; but we should not think of him as so dogmatic an opponent of Plato that he automatically rejected everything in the dialogues. He was prepared to learn from them too and to assimilate significant aspects of Plato’s reflections on music into his own discussions.⁵

3. Speusippus

We must now leave Plato behind and move on. To introduce the next phase of this enquiry I need to talk a bit about certain aspects of Aristoxenus’ musical epistemology. It’s well known that in its main outlines his approach in the *Elementa harmonica* has affinities with Aristotle’s account of scientific argumentation in the *Posterior Analytics*, and presumably owes a good deal to it.⁶ Both insist on the

⁵ Einarson and De Lacy (1967) also identify various reminiscences of the *Phaedrus* in the passages we have been examining. There are certainly some general similarities, but I do not think that they amount to evidence that Aristoxenus was directly indebted to this dialogue.

⁶ This has been observed by many commentators. See, e.g., Bélis (1986) 199–200 and 210–15 and Barker (2007) (see the General Index s.v. demonstration).

crucial role of *apodeixeis*, explanatory “demonstrations” of the truth of propositions, which are derived deductively from principles which themselves cannot be demonstrated. The authority of these principles is established by a different route, the route of *epagōgē* — something like “induction” — which begins from particular sensory experiences. Aristoxenus repeatedly makes the point that understanding of matters studied by harmonics can have no other source, and he dismisses with contempt the doctrines of those who claim to reach it through abstract mathematical reflections and calculations. (Here he no doubt has Platonists and some Peripatetics as well as the Pythagoreans in mind, and it would probably be misguided to look for any one specific target.)

In the last chapter of the *Posterior Analytics* Aristotle sets out the sequence of stages which must be followed from this starting point — repeated similar experiences, their storage in the memory, their unification into a single generalized kind, and so on — culminating finally in an immediate intellectual grasp on fundamental principles. I shall not rehearse the details of this familiar passage. For present purposes we need to focus only on the first few steps of an *epagōgē*, especially the point from which it begins. Aristoxenus maintains consistently that we can say nothing useful about melodic structures until we have had plenty of experience in listening to melodies of all kinds, and that in this listening we must learn to attend very carefully to all the subtleties of the melodies’ harmonic organization. Our perception must be trained to accuracy, he says; vague impressions are nowhere near enough to form the basis of a scientific *epagōgē*.

Two questions immediately arise. In the first place, Aristoxenus famously insists that the phenomena with which his science is concerned are precisely that, *phainomena*, the melodic systems with which we are presented “according to the representation of perception,” κατὰ τὴν τῆς αἰσθήσεως φαντασίαν (*Harm.* 13.23). He has no interest whatever in any so-called objective reality lurking behind these phenomena; the proper business of harmonics is with what we hear, in the guise in which we hear it, and with nothing else. This is a point to which we shall return later; but the problem here is that we are being asked to accept both that proposition and the requirement that we make our perceptions accurate — with the obvious implication that some perceptions are more accurate than others. This does not mean merely that they are more precise, that the more accurate

perceiver has a closer, more exact grasp on the detailed contents of his own experience. They must correspond accurately to the facts; in short, their reports must be objectively true. Although the science is concerned with nothing but what appears in perception, it is none the less a science. Its goal is the establishment of demonstrable truths which are universally valid, and hence its groundwork cannot consist in idiosyncratic impressions which do not correspond to the real state of affairs. But then, how could Aristoxenus respond to the kinds of contention notoriously attributed to Protagoras? If what we are concerned with are the “representations of perception” and nothing else, then if the wind feels cold to me and warm to you, we are both right; there is no question of one of us perceiving more accurately than the other, and no “science of wind-temperature” can possibly be built up from our impressions, however precisely we register them. In just the same way, we might argue, if I hear this interval as exactly a ditone and you hear it as something rather smaller, both of us are right about the contents of our own perceptions; neither is more or less accurate than the other; and there can be no kind of induction which takes this kind of perception as its starting-point and leads on to universally valid principles and demonstrations.

That is one problem. The second is that despite what I have been saying, Aristoxenus contends, repeatedly and emphatically, that the faculty of hearing, however well trained it may be, cannot by itself provide the foundations on which harmonic science can be built. All that it can distinguish, he asserts, are the sizes of intervals; and almost nothing of importance to harmonics — none of the features that distinguish genuinely musical forms of attunement from unmusical nonsense, and mark the distinctions between one kind of attunement and another — is determined by the sizes of the intervals between the notes. Everything that makes a melodic system the system it is hangs instead on what he calls the *dynameis*, the “functions” of its various components — for instance, in modern terms, the “function” of being the leading note or the dominant or the tonic of a scale; and these *dynameis* do not fall within the province of hearing. Here is Aristoxenus’ specification of the basis on which the science must be constructed. ἀνάγεται δ’ ἡ πραγματεία εἰς δύο, εἷς τε τὴν ἀκοὴν καὶ εἰς τὴν διάνοιαν. τῇ μὲν γὰρ ἀκοῇ κρίνομεν τὰ τῶν διαστημάτων μέγεθος, τῇ δὲ διανοίᾳ θεωροῦμεν τὰς τούτων δυνάμεις, “The

enterprise depends on two things, hearing and reason (*dianoia*), for through hearing we judge the sizes of the intervals, and through reason (*dianoia*) we apprehend their *dynameis*" (*Harm.* 33.4-9). In the course of book 2 he provides several long lists of *dynamis*-dependent melodic features of which a harmonic scientist must be aware in the pieces he listens to, none of which, as he repeatedly insists, can be grasped through our perception of the sizes of intervals.

We must tune in, as it were, to these "functional" features if we are to recognize, even in a rudimentary way, the ingredients that constitute something as a melody, and as a melody of a particular type; and if we cannot do that, we shall not even be able to set out on the road toward principles and demonstrations. The work of reason (*dianoia*) is indispensable when we are laying the foundations for harmonic enquiry, not just when we are erecting the superstructure. At some early stage, then, before the science proper can get under way, potential students of harmonics must make use not only of their hearing but also of something which — however Aristoxenus may have conceived it — is evidently a form of thought. Is it possible, then, to find an appropriate place for its initial exercise on Aristotle's epagogic ladder? If we take Aristotle as our guide it cannot be at the very beginning; nothing is involved there except the perception (*aisthēsis*) of particular instances. But wherever else we locate it we shall stub our toes on a difficulty, since in Aristoxenus' opinion, which strikes me as absolutely correct, there is no way in which the insights he attributes to reason (*dianoia*) can be derived, by induction or anything else, from the data which he says are provided by *aisthēsis*. The relevant kind of sense-perception, the hearing, can tell us only about the sizes of the intervals; and no sort of thinking will take us from that information alone to an apprehension of the essential *dynameis*.

It appears, then, that reason (*dianoia*) must play a part right from the start, regardless of what Aristotle had said; and it is important to recognize that this "dianoetic" apprehension of *dynameis* is not something we achieve, or only achieve, through intellectual reflection after the experience of listening to a melody is over. Unless it is active simultaneously with our listening we shall not be hearing the melody as melody at all, merely as a succession of pitches separated by certain intervals; and that will provide no basis for harmonic *epagōgē*. The point is made explicitly in an Aristoxenian passage of the Plutarchan

De musica which I have already mentioned. If we are to “follow,” παρακολουθεῖν, the course of a melody, it says, “sense-perception and *dianoia* must run along together, ὁμοδομεῖν, in the judgement of the elements of the music, and neither must either rush ahead ... or lag behind” (1143f–1144a). It is precisely the capacity to “follow” a melody in this way that Aristoxenus requires as the foundation of his science. Some sort of thinking must, therefore, be working in combination with *aisthēsis*, if our experience of particular melodies is to give any foothold to scientific enquiry. Harmonic *epagōgē* does not begin from mere hearing, but from a kind of listening which already involves some sort of musical interpretation, though at this stage we shall not be in a position to articulate explicitly the intuitions that inform it. It is, at least implicitly, an *interpretative* kind of listening. Without it we shall not be hearing music as music; and without this launching-pad the enterprise of harmonics cannot get off the ground.

What, then, has all this to do with Aristoxenus’ relations with the Academy? The point is that Aristoxenus’ recruitment of reason (*dianoia*) to this stage of the inductive process seems quite alien to Aristotle, at least to the Aristotle of the *Posterior Analytics*; and the closest approximation to Aristoxenus’ position that I have found among writers of the period is not in any Peripatetic source but in a fragment of Speusippus (Sextus Empiricus *M.* 7.145–6 = fr. 75 Tarán).

Since some things are perceptible and some intelligible, Speusippus said that the criterion of intelligible things is cognitive reason, and that of perceptible things is cognitive perception (*epistēmonikē aisthēsis*). He supposed cognitive perception to consist in the perception that participates in the truth accessible to reason. For just as the fingers of an aulete or a player of a stringed instrument have an activity which is skilled, but is not brought to fulfilment primarily in the fingers, being perfected instead through training in cooperation with reason, and just as the perception of a *mousikos* has an activity which grasps both what is attuned (*to hermosmenon*) and what is not attuned, an activity which is not innate (*autophyēs*) but arises from reasoning, in the same way cognitive perception shares, by its nature, in the cognitive work of reason, in pursuit of an unerring discrimination of the things submitted to it.⁷

⁷ It seems clear to me that either this passage or an intermediary’s paraphrase of it was known to Porphyry as well as to Sextus, and that he had it in mind when he

A comment by John Dillon on this fragment is worth noting here: the conception of “cognitive sense-perception” that it articulates, he says, is “quite distinctive,” that is, it is a conception peculiar to Speusippus, at least in this period.⁸ If he is right about that, we can have some confidence that anything recognisably similar in Aristoxenus is not coincidental; and, of course, he is quite likely to have been attracted to this part of Speusippus’ work not only by its relevance to abstract issues with which he was concerned, but also by the musical examples that illustrate it. For our purposes the most important part is not the comment about the performing musicians, the *auletēs* and the *psaltēs*, but what it says about the perception (*aisthēsis*) of a *mousikos*, a person who can recognize, when listening to a musical performance, what is attuned and what is not, *to hērmomenon* and *to anharmonon*. This is a perfectly good general description of the accomplishment needed by an Aristoxenian harmonic scientist as the foundation of his enquiries, and both of the technical terms are in Aristoxenus’ own regular vocabulary. The activity of such a person’s perception (*aisthēsis*), Speusippus tells us, is not *autophyēs* — that is, it is not something we possess merely by being born with the relevant sensory faculty — but is acquired through some sort of reasoning, *logismos*. And yet it is still a mode of *aisthēsis* — “cognitive” sense-perception, but sense-perception none the less.

Now Aristoxenus never bundles the two ingredients together in a single package; expressions like “cognitive perception” (*epistēmōnikē* [or perhaps *dianoētikē*] *aisthēsis*) do not figure in his writings. In his formulations, hearing (*akoē*) and perception (*aisthēsis*) are always distinguished from reason (*dianoia*) and are mentioned separately, and so are the roles they play. But as we have seen, they act simultaneously as elements in a single aesthetic experience, and to that extent his conception and the “distinctive” view of Speusippus are remarkably

was trying to elucidate a comment by Ptolemy on the vagueness and unreliability of unaided perception. “Let no one drag in the *aisthēseis* that have been trained under the guidance of reason,” he says, “such as the *aisthēseis* of the *technitai* [i.e., the performing musicians] in order to refute what has been said. Let him consider them in themselves, without the cooperation of reason, and then, so long as he is well-disposed and not merely quarrelsome, he will agree with the truth of what is said” (*in Harm.* 16.2–6).

⁸ Dillon (2003) 78.

similar. One reason why he does not adopt the Speusippian terminology of “cognitive perception” (*epistēmonikē aisthēsis*), I suppose, is that he does not want to muddy the waters; he finds it important to hammer home the distinct contributions of the two faculties involved, and to distance himself from predecessors who supposed that uninstructed *aisthēsis* provides the whole basis of the science. By holding the two faculties involved in musical experience apart, repeatedly drawing attention to the difference between them and underlining the crucial importance of the contributions of *dianoia*, he keeps the spotlight sharply focused, as is his habit, on the inadequacies of earlier theorists and the brilliant originality of his own epoch-making insights.

I submit, then, that concealed under the rhetoric of Aristoxenus’ self-satisfied polemics in the *Elementa harmonica* and the more temperate passages in the Plutarchan *De musica*, there is a conception with a recognisably Speusippian flavor. An additional morsel of support for this view may perhaps be found in a passage in Dionysius of Halicarnassus (*Comp.* 25) which again has close affinities with the Speusippus fragment; its theme is the capacity of skilled musicians, after long and arduous training, to grasp immediately the functions (*dynameis*) of the notes of any piece they hear and to reproduce it on their instruments. The details need not concern us here; the essential point is that there are no indications that Dionysius had ever read Speusippus, whereas traces of Aristoxenus are pervasive throughout his later works. By far the majority of the musical allusions in the *de Compositione Verborum* are Aristoxenian in origin, and the chances are that this apparent reminiscence of Speusippus is so too. Of course I cannot prove that Aristoxenus developed his version of the theory out of his reading of Speusippus, or even that he had looked at his writings. Maybe he reached his conclusions independently of any earlier authority, as he would certainly have wanted us to believe. But if we are to look for a source on which he drew, that, it seems to me, is the direction in which the evidence points.

Before we leave Speusippus behind we must go back briefly to the other question I mentioned. If his observations could help Aristoxenus to see how he needed to modify Aristotle’s statements about the foundations of scientific *epagōgē*, what about the Protagorean problem? The fact that *dianoia* is involved at this initial stage does nothing to show that there is something that the *phainomena* really are, over

and above what you or I make of them. Even if we could evade that difficulty, Aristoxenus says explicitly that reason (*dianoia*), like perception (*aisthēsis*), must be brought to accuracy through experience and training; hence the mere exercise of *dianoia* as such can be no guarantee that we are getting things right. But Aristoxenus makes no attempt to tackle these difficulties; the fundamental issue belongs to metaphysics, rather than to epistemology, and he says next to nothing about metaphysical matters. I cannot convincingly resolve the puzzles for him. I have only one, very tentative suggestion to make. It seems clear that Speusippus thought of the kind of perception he attributes to musicians and *mousikoi* as truth-bearing, amounting to something like knowledge; that is plainly implied in the epithet he gives it, “*epistēmonikē*” *aisthēsis*, “cognitive” sense-perception. This is certainly how Porphyry understood it in the remarks quoted in n. 7 above; it is precisely because it carries this epistemic authority that it should be excluded from discussions of ordinary *aisthēsis*, which does not. I have no idea how Speusippus tried to justify this view of it, if he did, though Porphyry seems to have thought it had solid grounds. But if he provided a plausible rationale for his position, perhaps it was enough to convince Aristoxenus that he had nothing to fear from the Protagorean conundrum. It seems a fairly feeble hypothesis, but I have nothing more illuminating to say about the matter.

4. Xenocrates

Let us move on now to the last Academic I want to consider, Xenocrates, who was in business in Athens throughout Aristoxenus’ time there, and of whose work he can hardly have been unaware, whatever he may have thought of it. The list of works attributed to Xenocrates by Diogenes Laertius, muddled and confusing as it is, contains several that are likely to have touched on musical issues, towards which his Pythagorean tendencies and his obsession with numbers will naturally have drawn him. We know that he wrote about some basic points in mathematical harmonics from a passage (fr. 87 Isnardi Parente) which, quite apart from its other intriguing features, is an object-lesson in the complex stratification of Greek scholarship, with layer upon layer of attributions laid on top of one another; it is a report of Porphyry, commenting on Ptolemy, retailing an account by Heraclides of statements

by Xenocrates about the doctrines of Pythagoras. (Greek scholars would have saved us a great deal of trouble if they had all been so explicit about the pedigrees of their reports.) It is a pity that we cannot be sure whether the very interesting ideas in acoustics developed in later parts of the passage are among those attributed by Xenocrates to Pythagoras, or ones Xenocrates asserted himself, or are to be assigned to Heraclides; scholarly opinion is divided.⁹ I shall not try to build anything substantial on the passage, which in any case does nothing to suggest a connection with Aristoxenus; but it does at least provide direct evidence of Xenocrates' interest in harmonics. It indicates (as we would in any case expect) that the harmonic theory with which he was working is of a mathematically based, "Pythagorean" kind; and it is perfectly possible, though I put it no more strongly than that, that Aristoxenus had Xenocrates in his sights when he dismissed this form of the discipline out of hand. Its exponents, he says, "reject perception (*aisthēsis*) as inaccurate, and invent 'intellectual' causes, and claim that height and depth of pitch arise from some ratios of numbers and relative speeds." He accuses such people of "talking irrelevancies" (*allotriologeîn*), and "uttering the most irrelevant (*allotriōtatous*) statements," which are quite contrary to the *phainomena* (*Harm.* 32.19–28). But by itself this is obviously not reliable evidence of a focus on Xenocrates, since as I said earlier, there were many others — Pythagoreans, Academics, various writers with no manifest philosophical ideology, and even Peripatetics, including Aristotle himself — whose approaches would have fallen under the same anathema.

John Dillon has drawn attention to certain features of Xenocrates' cosmology, attested in two passages of Plutarch, which might possibly be connected with his interest in harmonics. If the musical resonances which Dillon detects in them are genuine, it would be worth enquiring whether they lend any support to the hypothesis that he was drawing on Aristoxenus' writings. The relevant sentence in the first passage runs as follows: "Xenocrates says that the stars and sun are composed of fire and the first density (*pyknon*), the moon of the second *pyknon* and the air that is proper to it, and the earth of water and the third of the *pykna*; and that in general neither the dense (*pyknon*) as such nor

⁹ Heraclides seems to be the favorite choice; but even then there is no consensus about whether it is the fourth-century Heraclides of Pontus or a later figure of the same name.

the diffuse (*to manon*) is receptive of soul" (translation from Dillon, slightly modified).¹⁰

In his discussion of these *pykna*, "densities," Dillon first notes the use made of the concept by Anaximenes, and then remarks: "but there is another aspect of *pyknon* that must not be overlooked, and that is the musical — and thus Pythagorean — meaning of the term;" and he goes on to explain what a musical *pyknon* is.¹¹ Now if it could be shown that the passage can only be understood in the light of the musical sense of the term *pyknon*, or even that the introduction of this musical concept would add significantly to the sense, we might be entitled to find an Aristoxenian connection here too, since though Xenocrates would clearly be putting the concept to work in a broadly "Pythagorean" cosmological framework, Aristoxenus is the first writer we know of who makes significant use of the term *pyknon* in musical contexts. We might then argue that Xenocrates not only borrowed the concept of the musical *pyknon* from Aristoxenus, but went on to insert it into a completely new and alien environment, reinterpreting it within a Pythagorizing notion of the harmonic order of the cosmos.

Unfortunately I no longer believe that the case can be made.¹² Dillon himself does not contend that Xenocrates "was intending to use *pyknon* in its fully technical musical sense," only that he was trying to convey "the idea of a series of harmoniously graded and definite degrees of tension" (128). It seems clear, in fact, that the passage can be understood perfectly well without any reference to musical concepts at all, on the basis of the commonplace meaning of the adjective *pyknos* ("dense," "compact") in its application to material things. The sun is one node of compactness, made up from a densely packed group of fire-particles; the moon is another, made of compressed air; and the earth is a third, constituted (rather strangely) from water. Earlier statements in the passage of Plutarch do indeed indicate that these nodes form a series with progressively greater degrees of density; but there

¹⁰ Plut. *On the Face in the Moon* 943e–944a = fr. 161 Isnardi Parente; see Dillon (2003) 125–8.

¹¹ Dillon (2003) 127–8.

¹² I tried to defend it at the DePauw conference, but (as I now think) without success. I am grateful to Carl Huffman and others for explaining their excellent reasons for thinking it at best very insecure. That is a charitable estimate; it is probably mistaken.

is nothing to confirm the notion that the series is *harmoniously* graded or in any sense organized on a musical basis.

Again, if we suppose that the idea of “harmony” is implied by the use of the term *pyknon*, we shall need to find some intelligible way of fitting the word’s musical use to the cosmological picture, even if we are not to assign it its “fully technical musical sense.” But I do not see how that can be done. Harmonic theory identifies several kinds of *pyknon*, which can indeed be distinguished by their degrees of compactness, but there is no musical context in which there can be said to be exactly three of them. They can be classified into two kinds, enharmonic and chromatic; but in that sense there is no third member of the series, since diatonic systems are precisely those which do not contain a *pyknon*. The number can be increased if we distinguish all the varieties of chromatic *pykna*, but then there is no warrant for assigning any particular number to them, since such variations (according to Aristoxenus) are in principle unlimited in number. In any case, a system whose parts include *pykna* of different kinds or degrees of compactness is certainly not “harmonious” in any straightforward sense; it will need to be understood as a complex and derivative structure, modulating between scale-systems of several different sorts, and can hardly be construed as a paradigm of integrated perfection.

If the second passage of Plutarch¹³ has any connection with this one, it only makes matters worse. Plutarch is reflecting on Plato’s three-part soul, and specifically on the comparison (*Republic* 443d-e) between these parts’ interrelations and those between the fundamental notes of a musical attunement spanning an octave, *nētē* (written as *neatē*), *mesē* and *hypatē*. He refers, as another parallel case, to Xenocrates’ postulation of a “highest” Zeus, Zeus *hypatos*, and a “lowest,” Zeus *neatos*; and Dillon follows Krämer¹⁴ in postulating the existence in Xenocrates’ system of an intermediate deity corresponding to the note *mesē*. This would not only match the allusions in Plato and Plutarch but would fit comfortably with the tripartite divisions of the cosmos which are found elsewhere in Xenocrates’ work.

Here it seems quite reasonable to suspect that Xenocrates chose his terminology with the musical analogy in mind; Plutarch apparently

¹³ Plut. *Platonic Questions* 1007f = fr. 216 Isnardi Parente; see Dillon (2003) 132–3.

¹⁴ Krämer (1964) 37 n. 58 and 82 n. 209.

thought so. There is evidently no need to bring Aristoxenus into the picture, however, since the names of these notes were in common currency from the fifth century onwards. Nor does the passage give any support to a musical interpretation of the previous extract, since in a system limited to the range of an octave and bounded by the notes *nēte* and *hypatē* there can be no more than two *pykna*, one adjacent to *hypatē* and the other running upwards from *paramesē* (the note immediately above *mesē*). No *pyknon* can be associated with *nēte* if it is the highest note of the scale. In fact, the two passages are concerned with quite different issues and most probably have only the most remote connection with one another; any attempt to force them together is likely to be misguided. I conclude, reluctantly, that there is nothing we can learn from them about the relations between Xenocrates and Aristoxenus.

Let us move on into more promising territory. Aristoxenus' diatribe against those who "reject *aisthēsis* as inaccurate," which I mentioned above, seems to be connected with another whose details are lost, though we know the gist of it, and in this case Xenocrates is explicitly named. As a preliminary, we should remember that in the *Elementa harmonica* Aristoxenus never asserts that the contentions of the mathematical theorists who talk about ratios and speeds are false. On the contrary, he concedes that their statements about the physics of sound may be perfectly correct; his point, whenever he mentions them, is that they are irrelevant to harmonics. These theorists may be quite right about the material basis of differences in pitch, and about the numerical relations between the movements that generate pitches a given interval apart. But the mathematical principles to which, they conclude, a well-ordered set of pitch-determining movements must conform, have nothing to do with the musical principles that govern relations between the notes of a melody, as they present themselves to perception. The fact that elegant "intelligible" patterns can be formed by combining ratios according to certain mathematical principles has no tendency to show that the patterns formed or the principles on which they rest constitute specifically *musical* patterns and principles. From an Aristoxenian harmonic scientist's perspective, mathematical manipulations of data to do with the physics of sound can tell us nothing about music and are entirely beside the point, a tissue of irrelevancies.

The passage which refers to Xenocrates comes once again from Porphyry's commentary on Ptolemy's *Harmonics* (8.22–30 = fr. 88

Isnardi Parente). It is prefaced by a direct quotation from the *Elementa harmonica* (44.16–20), which summarizes briefly the point I have just been trying to explain. “In general,” says Aristoxenus, “we must take care at the beginning of our enterprise that we do not fall into alien territory (*hyperoria*), by setting out from a sound (*phōnē*) conceived as a movement of the air.” Porphyry continues as follows.

This is why some people criticized Xenocrates, with good reason, because when setting out to study dialectic he begins from sound (*phōnē*). They hold that the definition of *phōnē*, that it is a movement of the air, has no bearing at all on dialectic, and neither does the subsequent *diairesis*, which says that one kind of *phōnē* is such as to be composed of letters, and the other is such as to be composed of intervals and notes; for all these things are irrelevant (*allotria*) to the study of dialectic. And they say that a person who addresses the enquiry in this way is merely prefacing the study of dialectic with a journey through various theoretical topics that have no connection with it.

The grounds of this critique are precisely parallel to those exploited by Aristoxenus in his assault on harmonic theorists who base their doctrines on propositions drawn from physics and mathematics; the considerations they adduce as the foundations of their enterprise are irrelevant to the science in question. The first consideration mentioned is indeed identical in both cases. Just as the fact, if it is one, that a sound is a movement of the air has no bearing on the proper construction of musical systems, so also it has none on the construction of dialectical arguments. Aristoxenus would not have considered the second topic — the distinction between spoken and musical sounds — as irrelevant to harmonics, since harmonics is concerned exclusively with sounds of a certain sort and not with others, and he discusses the distinction at some length in the introductory phase of his work (we shall have some dealings with the passage in the final part of this essay). But he would have had no hesitation in denouncing its appearance in Xenocrates’ work on dialectic, on just the same grounds as before. The status of a piece of dialectical reasoning is wholly independent of the nature of the means by which it is conveyed to its audience; it makes no difference whether it is spoken, sung, written or indeed transmitted in Morse Code.

It is true that Porphyry attributes these criticisms only to “some people” (*tinai*), and not directly to Aristoxenus, although, as we have seen, he recognizes their Aristoxenian foundations. But it seems to me rather likely that Xenocrates’ original critic was Aristoxenus himself. Perhaps the reason Porphyry does not say so is that he found the critique in some intermediate source, possibly in a treatise on dialectic, a source which did not mention the critic’s name. That would explain why Porphyry here abandons the admirable policy he announces in the introduction to his commentary, of identifying by name the authors he quotes or whose views he reports. On the whole he is meticulous in sticking to this resolution throughout his massive compendium of quotations and paraphrases. He did not name Aristoxenus or anyone else as the source of this criticism, I suggest, because he had no unimpeachable textual evidence to support an attribution; but he had no doubt that an Aristoxenian tenet is at the root of it.

I have two main reasons for throwing caution to the winds and jumping in where Porphyrian angels fear to tread. The first is that it is not only the sentiments expressed but also the tone and the polemical strategy of the critique, so far as we can capture them from Porphyry’s report, that have the ring of Aristoxenus’ voice. It sounds exactly as he does in one of his regular bouts of bad temper, remorselessly going on kicking his victim when he’s already out for the count. Not content with the point about the definition of sound (*phōnē*) he rubs it in by lambasting the division (*diairesis*) that follows. He repeats three times the characteristically Aristoxenian accusation of irrelevance: the physics of sound “have no bearing at all on dialectic;” all the things mentioned are “irrelevant to the study of dialectic”; and Xenocrates is guilty of prefacing the study of dialectic with an excursus on matters that have nothing to do with it.¹⁵

¹⁵ It is perhaps worth mentioning some points at which the diction of the critique of Xenocrates corresponds to that of Aristoxenus in the *Elementa harmonica*. The verb *παραματεύομαι* is a favorite of his; so are *σύγχειμαι* and *ἄπτομαι* in the senses involved here; he is fond of elaborate compounds akin to *προδιεξιέναι*, though as it happens this particular verb does not occur in his surviving work; and syntactical arrangements such as *οὐδὲν οἰόμενους ... ὅτι ἐστίν*, or the *τὸ μὲν τοιοῦτον ... τὸ δὲ τοιοῦτον* formulation, flow readily from his pen. These indications are not conclusive, of course, since all these usages are moderately common; but taken together they are perhaps suggestive.

My second reason for attributing the criticism to Aristoxenus is utterly simple, perhaps naive: who else could it have been? If it were a later writer, then given the argument's evident basis in Aristoxenian reasoning, it would have had to be someone who had taken the trouble to read and understand what Aristoxenus had written, and specifically someone who had appreciated the force of his methodological and epistemological discussions in the *Elementa harmonica*. But we know of no one before Porphyry himself who fits that description. Certainly there were "Aristoxenians" in the later centuries; but, so far as we know, they did no more than to summarize the conclusions he reached, with occasional minor variations, and paid no attention to the philosophical reasoning on which his science was based. None of them seems to have had the motivation for doing a demolition job on Xenocrates or the brains to devise a critique of this sort. A handful of writers on music did indeed make comments about his epistemology — Ptolemaï of Cyrene and the "musical" Didymos spring to mind,¹⁶ as of course does Ptolemy — but they do little more than to note his broadly empirical approach in contrast to the rationalism of the Pythagoreans. It is conceivable that someone of Peripatetic tendencies might have invented an argument modelled on those of the *Elementa harmonica* as a stick to beat the Platonists with;¹⁷ but that strikes me as a far-fetched and desperate hypothesis. As to the writers on rhetoric, among whose works Porphyry probably found the argument, only Dionysius of Halicarnassus, so far as I can see, shows clear signs of having read Aristoxenus intelligently; he often draws on ideas that originated in musicological texts, but nowhere in his copious writings are there any traces of views like the one adopted by this critic. Much the likeliest guess, as it seems to me, is that Porphyry's source was a compiler rather than an original thinker, and that the criticisms came from one of Xenocrates' contemporaries. In that case the critic is most likely to be Aristoxenus himself.

My arguments for this conclusion obviously fall well short of proof, but the threads on which my suggestions will hang in the final part of my discussion will be even thinner. The problem from which it

¹⁶ See Porph. in *Harm.* 22.22–28.26.

¹⁷ One might think, for instance, of Adrastus of Aphrodisias in his commentary on the *Timaeus*; but he seems to be admirably even-handed in his treatment of the two schools of harmonic theory.

begins is nevertheless real and interesting, and of some importance to students of Greek musical theory, whether or not the solution which I very tentatively suggest carries any weight. The *agent provocateur* is the putative Pythagorean Nicomachus, typically regarded by historians of mathematics as a tedious bore without an original thought in his head. Perhaps that is too unkind; Boethius, who was no fool, took his work seriously enough to translate his *Introduction to Arithmetic*, and to use his second essay on harmonics, now lost, as the main basis for his massively influential treatise on music. But it remains true that Nicomachus was primarily a compiler rather than an innovator and that he cannot be credited with any great subtlety or independence of thought.

The passage in question is the second chapter of his little *Handbook of Harmonics*. It falls into two parts. The first discusses the two forms which vocal utterance can take, the “continuous” (*syneches*) and the “intervallic” (*diastematikon*); the former characterizes speech and the latter song. The second part considers the “spaces” or “ranges” (*topoi*) which each of them occupies, and the factors that determine the extent of these ranges. Some of this second part is a little confused, but what it seems to be talking about is the distance between the highest and the lowest pitches we can deploy when we sing and when we speak.

All this, or almost all, is patently and notoriously pirated from two well-known passages of Aristoxenus’ *Elementa harmonica*. But Nicomachus does not say so. On the contrary, the people to whom he attributes it are “those of the Pythagorean school”; it is a record of *Pythagorean* insights. What can have induced him to make this bizarre remark? There are at least three reasons for thinking it improbable that Nicomachus knew that the attribution is false and was deliberately trying to pull the wool over his readers’ eyes. In the first place, if he knew where the material really came from, he would also have known that his subterfuge would have been very easily detected. These parts of Aristoxenus’ work were not veiled in obscurity; they were paraphrased repeatedly by writers of the Hellenistic and later periods. Secondly, Nicomachus may have been ideologically blinkered and inclined to treat everything he agreed with as Pythagorean if he possibly could; but despite the late Flora Levin’s strictures on his treatment of Plato’s *Timaeus* there are no good reasons for thinking him dishonest.¹⁸ There

¹⁸ Levin (1975) 85–92.

are, in fact, no solid grounds, odd though this may seem, for believing that he had read Aristoxenus' work by the time he composed his Handbook. Aristoxenus is never mentioned in this essay; and the only time Nicomachus explicitly distinguishes a characteristically Aristoxenian view from his own (in ch. 12, the belief that the octave amounts to exactly six tones), he does not attribute it to Aristoxenus but to more recent theorists (*hoi neōteroi*), as if it were a delusion that had set in only a short time ago. I suspect that he was genuinely unaware that the original source of this material was Aristoxenus, and that he had what he took to be respectable evidence of its Pythagorean credentials.

My third point is more substantial. The discussion in chapter 2, especially in the first part, preserves faithfully the general tenor and many of the minutiae of Aristoxenus' account of the two forms of vocal movement. But it has been very ingeniously modified so as to eliminate all the ingredients of that account which cannot be assimilated to Pythagorean theory and to massage its essential concepts into Pythagorean shape. No trace is left, for example, of Aristoxenus' insistence that we consider only the "representations of perception," which recurs at least a dozen times in the course of his discussion. What Aristoxenus says about the "continuous" kind of vocal movement, for instance, is that "the voice appears to perception to traverse a certain range <of pitch> in such a way that it never stands still, not even at the limits (*perata*) themselves — at least according to the representation of perception — but appears to travel continuously to the point of silence (*mechri siōpēs*)" (*Harm.* 8.19–25). The parallel remark in Nicomachus is merely that in this form of sound (*phōnē*) "we do not make the sounds clear and separate from one another, but drag the utterance along until what is being said is completed" (239.8–12 Jan). Aristoxenus' emphatic reiteration that he is talking only about what appears to perception has completely disappeared.

Nicomachus' version has also been cleansed of all reference to the movement of the voice between points in the dimension of pitch, which Aristoxenus makes the whole subject of his discussion and of which he identifies two kinds, the continuous and the intervallic. In its place we find the quite un-Aristoxenian notion of two forms (*eidē*) of the voice; and instead of continuous or intervallic movement from point to point through intervals we have the conception of pitches as *megethē*, "magnitudes," which differ from one another quantitatively,

and which in one form of *phōnē* are made clearly distinct and in the other are not. In the former the “parts” of *phōnē*, that is, the notes or pitches, are placed one after another as separate items, while in the other they merge seamlessly together. To clarify this point a little, notes so conceived are not positions to which the voice moves, as they are in Aristoxenus, but entities which the voice creates; and they are not distinguished by the sizes of the gaps between them but by their own quantitative attributes. The pitches of notes, in this writer’s view, and emphatically not in Aristoxenus’, are magnitudes. The intervallic kind of *phōnē*, the writer asserts, is “articulated by the magnitudes belonging to each note”; it “makes clear the magnitude which each of the notes possesses”; and we ascend from a lower pitch to a higher by a process of augmentation (*auxanein*), illustrated by the analogy of putting additional weights on a balance. These and other strategic manipulations of Aristoxenus’ account are unthinkable from Aristoxenus’ own perspective but chime perfectly with the conceptual apparatus of the Pythagorean tradition. The point I want to bring out is that the adaptations have been very cleverly and consistently done and are the product of an ingenious mind with an unwavering grasp of the issues. I simply cannot believe that Nicomachus was capable of devising them himself. We should take what he says at face value: so far as he knew, this was all Pythagorean work.

So who was the clever adaptor? Which of Nicomachus’ predecessors would have had both the motivation and the brains for the task? The Pythagorized version was not part of the mainstream tradition of Hellenistic thought; every other reminiscence of Aristoxenus’ discussion that I know — and there are at least ten of them in the surviving texts — is quite innocent of Pythagorean contamination, though they contain confusions and oddities of their own. Here again I am arguing, riskily, from the silence of our sources; no specialist in harmonics between Aristoxenus and Nicomachus appears to fit the bill. But suppose we look outside the specialized harmonic tradition for an author likely to have studied Aristoxenus, who would have found things of interest in the relevant passages of the *Elementa harmonica*, and who had reasons for recreating them in Pythagorean disguise. This is where hyperbolic speculation sets in; but it seems to me that Xenocrates is at any rate the likeliest candidate. We know that he was interested in harmonic theory, and we know about his Pythagorizing tendencies.

We have also noted Porphyry's evidence that he wrote on dialectic and that he introduced distinctions between speech and song in the preliminary stages of his discussion.

I have mentioned Aristoxenus' description of "continuous" vocal movement and its counterpart in Nicomachus. What I have not yet said is that so far as its diction is concerned, Aristoxenus' statement has a closer parallel in another sentence in Nicomachus. "The range (*topos*) of the continuous kind of *phōnē* is by nature indeterminate in size, taking the limit (*peras*) proper to it from wherever the speaker begins and wherever he ends, that is, from the first utterance to the final silence (*mechris eschatēs siōpēs*)" (239.20–3 Jan). The only point I want to make about this is that, although the verbal echoes of Aristoxenus are unmistakable, this remark about the size of the *topos* used in speech has no counterpart in Aristoxenus' work. He describes the continuous vocal movement used in speech only to clarify, by contrast, the intervallic character of the movement used in singing; he writes later, at *Elementa harmonica* 13.20–15.12, about the extent of the range that can be used in melody, but he has no reason for offering a view about the pitch-range used in speech. No other musical writer discusses the matter, and Nicomachus himself pursues it no further. The writer on whose work he was drawing, however, evidently took the trouble to balance his Pythagorized Aristoxenian theses about singing with parallel points about speech, even in situations where Aristoxenus did not. It is a curious fact that when he does so he borrows the plumage of Aristoxenus' diction on a different issue for the purpose. But leaving diction aside, the essential point is that this is exactly what we would expect of a writer engaged in systematic division (*diairesis*) of the sort that Porphyry's report attributes to Xenocrates, especially if the topic towards which he was moving was not music at all, but dialectic. I rather suspect, though like much else in this paper I cannot prove it, that what Nicomachus has reproduced comes from the very passage of Xenocrates' work on dialectic which the critics mentioned by Porphyry, whom I identify with Aristoxenus, condemned as irrelevant to the subject.

It is perhaps worth adding that Xenocrates, if indeed it is he, may not have been wholly mistaken or dishonest in making the Pythagoreans responsible for the material recorded by Nicomachus. Certainly the account itself is based on Aristoxenus, but we are told by Porphyry

that Archytas too had discussed “intervallic” vocal movement, in a passage which he says he has omitted just before the end of his quotation of what we know as Archytas fr. 1 (in *Harm.* 57.24–5). If Archytas did that, it is highly probable that he mentioned the “continuous” form of movement too, to bring out the special characteristics of the “intervallic” type. The distinction, though not the Nicomachean formulation of it, may indeed have a Pythagorean pedigree.

All this speculation is a lot to swallow, but let us imagine (if only for a moment) that every bit of it is true. In that case we are faced with a most engaging complex of interactions between Aristoxenus and Xenocrates. Aristoxenus may have had Xenocrates among others in mind when he dismissed the whole business of physical acoustics and the associated mathematics as irrelevant to harmonics. Disregarding Aristoxenus’ contentions, Xenocrates prefaced his study of dialectic with a physicist’s definition of sound (*phōnē*) and an account of the differences between speech and singing, adding insult to injury by pilfering Aristoxenus’ examination of the issue and re-dressing it in Pythagorean clothes. Aristoxenus retorted by repeating his accusations of irrelevance, *hyperoria* and *allotriologeia*. There is no denying that it makes a pretty pattern: assimilations and adaptations on the one part, intolerant criticisms and perhaps understandable irritation on the other — behavior thoroughly characteristic of both authors.

5. Conclusion

I said at the beginning of this essay that it would be very strange if Aristoxenus had paid no attention to ideas formulated in the Academy, or if contemporary Academics, given their interest in musical issues, had taken no notice of him. But I cannot claim that the reflections I have offered have proved anything about their interactions, except in the case of Aristoxenus’ treatment of Plato. In that connection we have some direct evidence, and various other fairly firm indications of Aristoxenus’ familiarity with the dialogues. He had clearly read relevant parts of them, and his responses to them were flexible; he did not automatically shift into critical mode. The suggestion that he drew on Speusippus’ work has something to be said for it, I think, but patently falls far short of certainty; and the grounds of my speculations about the relations between his writings and those of Xenocrates are even

more nebulous — it would be easy to dismiss them as untenable. Conversely, there may be a basis, which I have missed, for arguing that Aristoxenus took note of the work of other Academics such as Heraclides and Philip of Opus. But my main purpose in writing this paper was to open the question, not to provide a definitive answer, and I shall be delighted if it prompts other scholars to pursue the investigation further. Perhaps they will be able to find more conclusive evidence than I have been able to unearth.

Frequently Used Abbreviations

DK	Diels, Hermann. 1951. <i>Die Fragmente der Vorsokratiker</i> , 6th ed. rev. W. Kranz. Berlin: Weidmann.
FHG	Müller, C. 1841–1870. <i>Fragmenta Historicorum Graecorum</i> . Paris: Didot.
FHS&G	Fortenbaugh, W., P. Huby, R. Sharples and D. Gutas, eds. 1992, repr. with corrections 1993. <i>Theophrastus of Eresus: Sources for His Life, Writings, Thought and Influence</i> . Leiden: Brill.
FGrHist	Jacoby, F. 1923–. <i>Fragmente der griechischen Historiker</i> . Berlin: Weidmann, Leiden: Brill.
Giannini	Giannini, A. ed. 1966. <i>Paradoxographorum Graecorum reliquiae</i> . Milan: Istituto Editoriale Italiano.
Gigon	Gigon, O. 1987. <i>Aristotelis opera III: Librorum deperditorum fragmenta</i> . Berlin: de Gruyter.
IG	<i>Inscriptiones Graecae</i> . 1873–.
K-A	Kassel, R. and C. Austin. 1983–. <i>Poetae Comici Graeci</i> . Berlin: de Gruyter.
Kern	Kern, O. 1963. <i>Orphicorum fragmenta</i> . Berlin: Weidmann.
LSJ	Liddell, H. G. and R. Scott. 1968. <i>A Greek English Lexicon</i> , revised by H. S. Jones and R. McKenzie. Oxford: Clarendon.

- PMG Page, D. L. 1962. *Poetae Melici Graeci*. Oxford: Oxford University.
- RE Pauly, A., G. Wissowa and W. Kroll. 1893-. *Real-Encyclopädie der classischen Altertumswissenschaft*. Stuttgart: Metzler.
- Da Rios Da Rios, R., ed. 1954. *Aristoxeni Elementa Harmonica*. Rome: Officina Poligrafica.
- Rose Rose, V. 1886. *Aristotelis fragmenta*. Leipzig: Teubner.
- Ross Ross, W. D. 1955. *Aristotelis fragmenta selecta*. Oxford: Oxford University.
- SEG *Supplementum epigraphicum Graecum*. 1923-.
- SSR Giannantoni, G. 1990. *Socratis et Socraticorum reliquiae*. Napoli: Bibliopolis.
- Tarán Tarán, L. 1981. *Speusippus of Athens*. Leiden: Brill.
- Wehrli Wehrli, F. 1967². *Die Schule des Aristoteles*. Vol. 2, *Aristoxenus*. Basel: Schwabe. [For other volumes in the series see the Works Cited.]
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